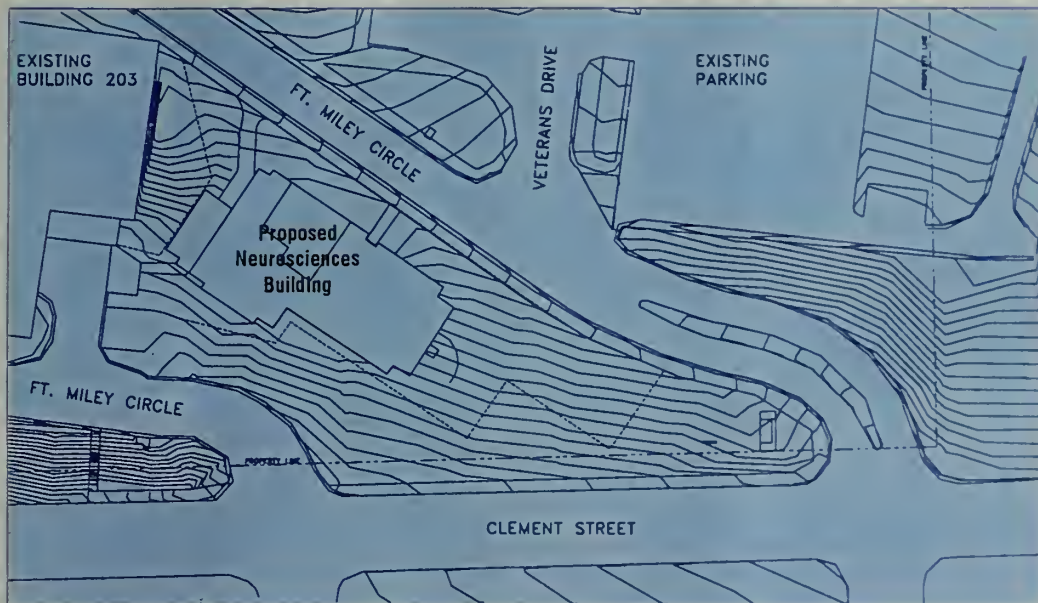


# Veterans Affairs Medical Center Neurosciences Building

## *Draft Environmental Assessment*



*Prepared for:*

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September 1995

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US DEPARTMENT OF VETERANS AFFAIRS  
SAN FRANCISCO MEDICAL CENTER  
NEUROSCIENCES BUILDING  
ENVIRONMENTAL ASSESSMENT

ABSTRACT

The US Department of Veterans Affairs San Francisco Medical Center (VAMC) proposes to construct a 14,700 square foot Neurosciences Building on its existing campus. The purpose of the new building is to alleviate overcrowding and substandard conditions at the Substance Abuse Treatment (SAT) and Post Traumatic Stress Disorder (PTSD) clinics currently housed elsewhere on the VAMC campus. Building 9, which houses the existing SAT Clinic would be converted back to its original use as a duplex residence.

This Environmental Assessment (EA) evaluates the environmental effects associated with three alternative scenarios. These scenarios include constructing a 14,700 square foot building, constructing a 12,500 square foot building, and a no-action alternative. Both building alternatives would be two-story buildings located on an undeveloped area near the VAMC's Clement Street frontage. The primary difference between the two building alternatives is the provision of additional office space in the larger building. Both building alternatives would use existing staff and serve existing patients relocated from other buildings at the VAMC. No additional staff or increase to existing patient load are proposed for the Neurosciences Building.

This EA analyzes the effects of the alternatives on land use and planning, visual resources, population and socioeconomics, cultural resources, biological resources, public services and utilities, water resources, geology and soils, traffic and parking, air quality, noise, and hazardous materials and wastes. No significant adverse impacts to these resources were identified from construction and operation of the Neurosciences Building. Construction of the proposed building would not adversely affect any contributing elements of the Fort Miley Historic District which is listed on the National Register of Historic Places.

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September 1995

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# TABLE OF CONTENTS

	<u>Page No.</u>
<b>1. PURPOSE OF AND NEED FOR ACTION.....</b>	<b>1-1</b>
1.1 PURPOSE AND NEED .....	1-1
1.2 SITE DESCRIPTION.....	1-2
1.3 SCOPE AND CONTENT .....	1-5
1.4 PUBLIC INVOLVEMENT.....	1-6
1.5 REGULATIONS AND PERMITS .....	1-7
<b>2. DESCRIPTION OF ALTERNATIVES .....</b>	<b>2-1</b>
2.1 PREFERRED ALTERNATIVE.....	2-1
2.2 REDUCED PROJECT ALTERNATIVE .....	2-6
2.3 NO-ACTION ALTERNATIVE .....	2-7
<b>3. AFFECTED ENVIRONMENT .....</b>	<b>3-1</b>
3.1 LAND USE AND PLANNING.....	3-1
3.2 POPULATION AND SOCIOECONOMIC CHARACTERISTICS .....	3-3
3.3 VISUAL AND AESTHETIC RESOURCES.....	3-5
3.4 TRANSPORTATION AND PARKING .....	3-7
3.5 CULTURAL RESOURCES.....	3-8
3.6 GEOLOGY AND SOILS.....	3-11
3.7 WATER RESOURCES .....	3-17
3.8 BIOLOGICAL RESOURCES .....	3-18
3.9 PUBLIC SERVICES AND UTILITIES.....	3-22
3.10 AIR QUALITY AND CLIMATOLOGY .....	3-24
3.11 NOISE.....	3-27
3.12 HAZARDOUS MATERIAL AND WASTE .....	3-29
3.13 HAZARDOUS MATERIAL AND WASTE .....	3-32
<b>4. ENVIRONMENTAL CONSEQUENCES.....</b>	<b>4-1</b>
4.1 LAND USE AND PLANNING.....	4-1
4.2 POPULATION AND SOCIOECONOMICS .....	4-2
4.3 VISUAL AND AESTHETIC RESOURCES.....	4-3
4.4 TRANSPORTATION AND PARKING .....	4-4
4.5 CULTURAL RESOURCES.....	4-6
4.6 GEOLOGY AND SOILS.....	4-7
4.7 HYDROLOGY AND WATER QUALITY.....	4-8
4.8 BIOLOGICAL RESOURCES .....	4-9
4.9 PUBLIC SERVICES AND UTILITIES.....	4-9
4.10 AIR QUALITY AND CLIMATOLOGY .....	4-12
4.11 NOISE.....	4-14
4.12 HAZARDOUS MATERIALS AND WASTE.....	4-16
<b>5. OTHER CONSIDERATIONS REQUIRED BY NEPA .....</b>	<b>5-1</b>
5.1 UNAVOIDABLE ADVERSE IMPACTS.....	5-1
5.2 RELATIONSHIP BETWEEN SHORT-TERM USES AND LONG-TERM PRODUCTIVITY.....	5-1
5.3 IRREVERSIBLE OR IRRETRIEVABLE COMMITMENT OF RESOURCES.....	5-1
5.4 GROWTH-INDUCTING IMPACTS .....	5-1
5.5 CUMULATIVE IMPACTS.....	5-1
5.6 ENVIRONMENTAL JUSTICE.....	5-4

## TABLE OF CONTENTS *(continued)*

	<u>Page No.</u>
6. CONSULTATION AND COORDINATION.....	6-1
7. LIST OF PREPARERS .....	7-1
8. REFERENCES .....	8-1

### APPENDICES

- A NHPA Section 106 Consultation Cover Letter
- B Photographs
- C Coastal Consistency Determination

### LIST OF FIGURES

Figure 1	Site Location.....	1-3
Figure 2	VAMC Site Plan.....	1-4
Figure 3	Preferred Alternative Site Plan .....	2-3
Figure 4	Preferred Alternative Elevations.....	2-4
Figure 5	Reduced Project Alternative Site Plan .....	2-8
Figure 6	Reduced Project Alternative Elevations.....	2-9
Figure 7	Fort Miley Historic District .....	3-4
Figure 8	Regional and Site Geology.....	3-13
Figure 9	Active Regional Faults.....	3-15

### LIST OF TABLES

Table 1	Sensitive Species Near the VAMC .....	3-20
Table 2	Land Use Compatibility Chart for Community Noise .....	3-30
Table 3	Summary of Noise Limits Established in the San Francisco Noise Ordinance .....	3-31
Table 4	Construction Period Emissions Inventory.....	4-13
Table 5	Typical Construction Site Noise Impacts .....	4-15

# 1. PURPOSE OF AND NEED FOR ACTION

This Environmental Assessment (EA) has been prepared to assess the environmental effects associated with the proposed construction of the Neurosciences Building at the US Department of Veterans Affairs San Francisco Medical Center (VAMC). This EA has been prepared in conformance with the National Environmental Policy Act (NEPA), VA Regulations Title 38 CFR, Part 26, Environmental Effects of VA Actions, which implements NEPA at VA facilities. Although sections 26.6-26.7 of these regulations state that VA projects of less than 75,000 square feet are normally categorically excluded from further review under NEPA, the VA has chosen to prepare a NEPA Environmental Assessment (EA) for the 14,700 gross square foot Neurosciences Building project.

## 1.1 Purpose and Need

The proposed action would relocate two on-going VAMC clinical treatment programs: the Substance Abuse Treatment (SAT) Clinic, located in Building 9, and Post-Traumatic Disorder (PTSD) Program, occupying a portion of Building 8 to new facilities at the Neurosciences Building. Building 9, which does not meet the standards of the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), Life Safety Codes, or the accessibility requirements of the Americans with Disabilities Act, will be entirely vacated and converted back to residential quarters (for which it was originally designed). The life safety and handicap access issues at Building 9 have led to citations by the JCAHO, OSHA and VA Regional Safety Engineers.

Building 8, which houses a variety of psychological services including the PTSD Program, is severely overcrowded with offices now occupied by as many as three clinicians at one time. This situation is inappropriate for the delivery of mental health care because of the need for patient privacy. Relocation of the PTSD Program to the Neurosciences Building would reduce the number of clinicians per office at Building 8. There would be no increase in the number of employees, clinics, or patients associated with the relocation of these services.

Prior to developing the current proposal, between 1988 and 1994 the VAMC attempted to lease space in other parts of San Francisco for the SAT Clinic as described below. These attempts were unsuccessful due either to neighborhood opposition or inability to reach agreement as to terms of the lease. The VAMC consequently concluded that construction of additional space at the existing campus would be necessary to provide the SAT Clinic services in compliance with JCAHO and other agency requirements. To alleviate the overcrowded conditions in Building 8, it was also decided to relocate the PTSD Program to the new facility.



*Off-Site Lease Chronology*

- 1988: Attempted to lease space at 1049 Market Street; withdrawn due to neighborhood opposition.
- 1989: Attempted to lease space at former dental clinic at closed Public Health Hospital on Lake Street; dropped due to potential competing uses.
- 1989: Attempted to lease space at 967 Market Street; withdrawn due to neighborhood opposition
- 1990: Attempted to rehabilitate and lease space at closed Public Health Hospital; failed when Army ended negotiations.
- 1991: Negotiated a VAMC/DOD sharing agreement with Letterman Army Clinic to provide space for SAT Clinic at Letterman complex in exchange for providing certain services to Army patients. Agreement never effected due to planned closure of Letterman and the Presidio.
- 1991-3: Two attempts to lease space in two locations at Letterman complex failed due to inability to agree on rents. The VAMC also proposed conversion of the entire Letterman complex to VAMC use as part of long range construction development plans. This failed due to opposition from the Department of the Interior.

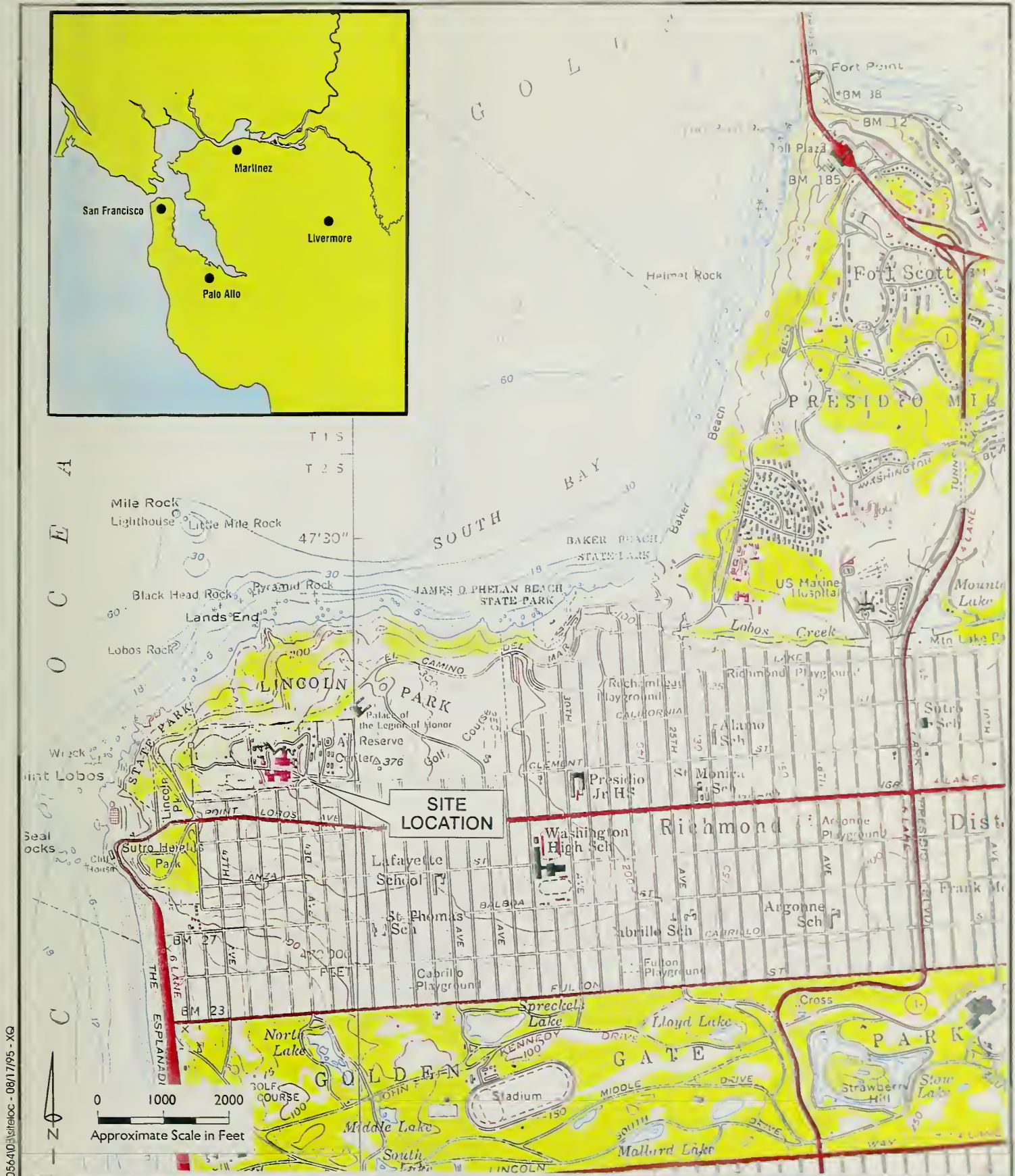
1.2 Site Description

*Veterans Affairs Medical Center*

The site of the proposed Neurosciences Building is located on the 29-acre VAMC campus near the northwestern tip of the City of San Francisco (Figure 1). The campus is surrounded by recreational and open space lands of the City of San Francisco's Lincoln Park on the north and east, by recreational lands of the Golden Gate National Recreation Area's (GGNRA) West Fort Miley on the west, and by single and multiple-family residences across Clement Street to the south.

The VAMC contains over one million square feet of development that includes 28 medical, residential, and support buildings, several paved parking lots, and one parking structure (Figure 2). A total of 1,224 parking spaces are located on the VAMC campus. The 252 bed VAMC facility operates 24 hours a day, seven days a week and serves approximately 233,000 patients annually. VAMC staff includes physicians, medical school/education staff, and students, as well as a large variety at other full-time, part-time and volunteer positions that work staggered (eight to twelve hour) shifts over a 24-hour day.



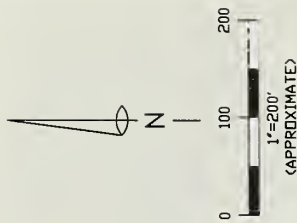


The proposed Neurosciences Building would be located on the campus of the Veterans Affairs San Francisco Medical Center.

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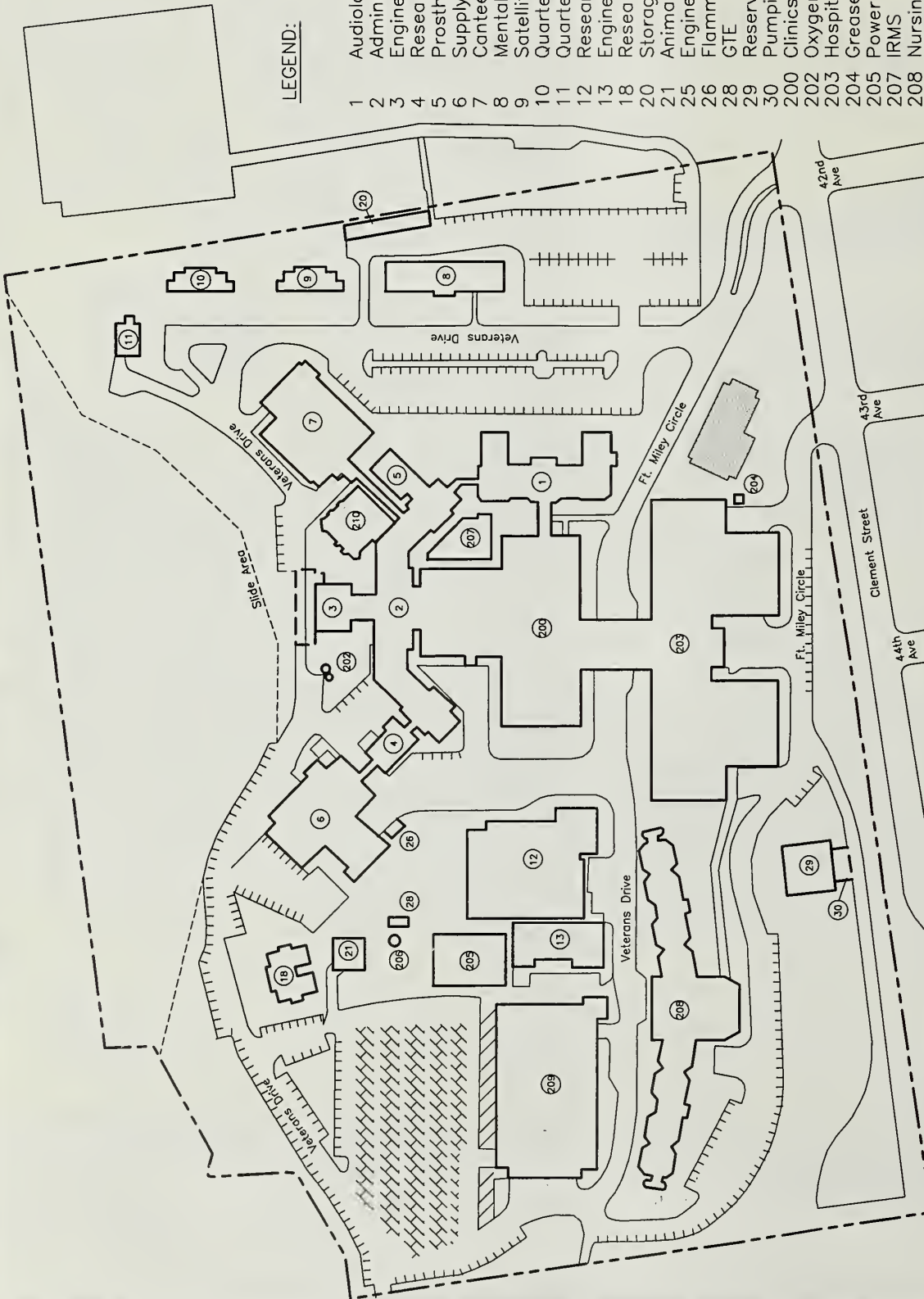
**Site Location**  
San Francisco, California

**Figure 1**





**LEGEND:**

- 1 Audiology/Personnel/Laboratory
- 2 Administration/Research
- 3 Engineering
- 4 Research
- 5 Prosthetics
- 6 Supply/Library/Fiscal/Research
- 7 Canteen, Chapel
- 8 Mental Health
- 9 Satellite Clinic
- 10 Quarters
- 11 Quarters
- 12 Research
- 13 Engineering Shops
- 18 Research Administration
- 20 Storage
- 21 Animal House
- 25 Engineering Shops
- 26 Flammable Storage
- 28 GTE
- 29 Reservoir
- 30 Pumping Station
- 200 Clinics
- 202 Oxygen Storage
- 203 Hospital
- 204 Grease Trap
- 205 Power Plant
- 207 IRMS
- 208 Nursing Home
- 209 Parking Structure
- 210 District Counsel Office



**LEGEND:**

-  Proposed Neurosciences Building
-  VAMC Property Line

The VAMC includes over one million square feet of development located in a variety of buildings on 20 acres.

**TETRA TECH**

# VAMC Site Plan

San Francisco, California

**Figure 2**

Source: VAMC 1995



### *Neurosciences Building Site*

The proposed building site is located in the southeastern corner of the VAMC facility north of Clement Street at 42nd Avenue (Figure 2). The site is bordered by the Fort Miley Circle access road on the north, Building 203 and another branch of Fort Miley Circle to the west, and separated from Clement Street to the south by a row of mature pine trees. Several other mature trees are located throughout the proposed site. Surface parking lots of the VAMC are located across Fort Miley Circle north and east of the site, while residential uses are located across Clement Street south of the site.

The new building would be built on the western portion of a roughly triangular-shaped existing open space area planted with grass. The lawn area slopes south (towards Clement Street) at about a 7:1 (horizontal to vertical) angle. Site elevations range from about 318 to 343 feet above sea level. Two footpaths run through the site connecting the Building 200-203 access road to the southeastern entrance of Building 203 and to Clement Street. No structures exist on the site or on the overall site area.

Primary access to the VAMC and the project site is via Clement Street and 42nd Avenue. Two stop-sign-controlled access points occur at 42nd and 43rd Avenues. Emergency access exists through GGNRA lands to the west. Regionally, north/south access is via Highway 101 and Highway 1 while east/west access is via Geary Avenue or Clement Street. There is no public access to the VAMC from the north, west, or east.

## 1.3 Scope and Content

### *Scope*

This EA addresses the environmental effects of construction of a proposed Neurosciences Building at the VAMC campus in San Francisco. Three alternatives are considered: a 14,700 square foot structure, a 12,500 square foot structure and no construction (the no action alternative). The resource areas evaluated include land use, visual and aesthetic resources, population/socioeconomics, transportation and parking, cultural resources, geology and soils, hydrology and water quality, biological resources, air quality, noise, and hazardous materials and waste.

### *Content*

This EA is intended to meet NEPA content requirements. The organization and content of this document are outlined below.

*Chapter 1* provides an overview of the need for the proposed Neurosciences Building, outlines the organization of the document, and summarizes the regulations and permitting requirements related to the proposed building.

*Chapter 2* describes the alternatives evaluated in the EA including the proposed building, a reduced size building, and the no-action alternative. The proposed building is the VA's Preferred Alternative.

*Chapter 3* provides a description of the existing environmental conditions at the VAMC and the proposed Neurosciences Building site.

*Chapter 4* projects the potential impacts to the resource areas of implementing each alternative, and identifies mitigation measures intended to reduce or eliminate any identified potential impacts.

*Chapter 5* addresses a number of topics required by federal regulations including unavoidable adverse impacts, the relationship between short-term uses and long-term productivity, irreversible or irretrievable commitments of resources, and growth-inducing impacts.

*Chapters 6-8* provide background information on consultation, document preparers, and references.

#### 1.4 Public Involvement

The VAMC has conducted a public involvement program to inform and solicit input on the proposed Neurosciences Building from the neighborhood near the San Francisco Medical Center. This public involvement program involved newsletter mailings, establishment of a neighborhood advisory committee, and regular meetings of that committee with VAMC management staff. This program and the issues raised by the neighbors are summarized below.

In June 1994, the VAMC first mailed notification of the proposed project to some 300 households in the area bounded by 34th Avenue on the east, Geary Boulevard/Point Lobos Avenue on the south, El Camino Del Mar on the west, and Seal Rock Drive and Clement Street on the north. As of June 1995, three additional newsletters were mailed to the list of neighbors and others expressing interest. The September 1994 issue included site plans and preliminary drawings of the building's south and east elevations. Parking was addressed in the August and September 1994, and March 1995 issues.

A neighborhood advisory committee was established as a forum for exchange of information about neighborhood concerns and San Francisco Medical Center programs, services, and future plans. It also would serve to assist the VAMC in alleviating and responding to neighborhood concerns. The first meeting was held in September 1994, with subsequent meetings held in October and November 1994, and February, March, April, and June 1995. Notification of meetings was mailed to persons in attendance and others desiring notification. In addition, newsletters



published since the committee was formed have included notices of upcoming neighborhood advisory committee meetings.

Major issues raised at the meetings included parking, traffic (including Muni buses), noise, landscape maintenance, crime, loitering, vandalism, litter, future Medical Center changes, and neighborhood preservation (including preservation of property values). Specific VAMC projects of concern included the Neurosciences Building and the seismic upgrade project. Concerns regarding the Neurosciences Building focused on submittal of project construction plans to the City, the City's jurisdiction, project environmental impacts, and impediments to locating the Substance Abuse Treatment program off-site. Specific information regarding project design and operation was presented to the committee. In addition, later meetings were used by the VAMC to address certain concerns raised at the earlier meetings, and to update the public on modifications to the Neurosciences Building plans and other VA facility changes (including projected decompression of certain VAMC services to other sites and facilities). Neighbors also were briefed on meetings between Medical Center officials, local and federal political officials, City Planning Department staff, and community group representatives.

## 1.5 Regulations and Permits

In addition to compliance with NEPA, the proposed action is required to conform with the Coastal Zone Management Act and Section 106 of the National Historic Preservation Act. (NHPA). The federal government is not required to comply with state or local permit requirements unless those requirements implement federal laws and regulations; however, it is required to consult with local agencies as per Public Law 100-678.

### *Coastal Zone Management Act*

The VA Medical Center San Francisco lies within the 1,100-mile California coastal zone that is regulated by the California Coastal Act (CCA) of 1976, as amended, and the federal Coastal Zone Management Act (CZMA). The CCA established the California Coastal Commission (CCC) which has been charged with implementing the CZMA for most of coastal California (with the exception of San Francisco Bay). The CCC developed the California Coastal Management Program (CCMP) pursuant to the requirements of the CZMA. The CCC also is the agency responsible for reviewing proposed federal and federally authorized activities for consistency with the federally approved CCMP.

Federal or federally approved actions that could potentially affect the coastal zone must be consistent with the CCMP to the maximum extent practicable. The federal entity proposing the action must submit a coastal consistency determination to the CCC documenting how the action complies with the policies of the CCMP. The VAMC submitted a Negative Determination for the Proposed Neurosciences

Building to the CCC. The CCC concurrence concluded that the proposed action would not adversely affect coastal recreation because there would be no increase in parking demand and therefore no adverse affect on coastal recreation. This issue is discussed in greater detail in Sections 3.1 and 4.1 (Land Use and Planning) of this EA.

#### *National Historic Preservation Act*

The National Historic Preservation Act (NHPA) sets forth national policy for protecting historic properties under the jurisdiction or control of federal agencies. Section 106 of the Act requires that federal agencies consider the effects of their actions on historic properties listed or eligible for listing on the National Register of Historic Places (NRHP). Implementing regulations of the NHPA require that the Advisory Council on Historic Preservation (ACHP) be provided the opportunity to comment on federal actions that would affect National Register eligible or listed properties. The NRHP includes properties of national, state, or local significance. Generally, they are properties associated with American history, architecture, engineering, or archaeology.

As a federal agency, the Department of Veterans Affairs is responsible for compliance with the NHPA and its implementing regulation 36 CFR 800. A portion of the VAMC property is listed on the NRHP as the Fort Miley Historic District. For the proposed construction of the Neurosciences Building, the VAMC is required to assess the effects of the undertaking on the National Register District. NHPA requirements are implemented jointly by the US Advisory Council on Historic Preservation and the California State Office of Historic Preservation (SHPO). The proposed action's compliance with NHPA requirements is addressed in the Cultural Resources section of this EA (3.5 and 4.5). The consultation letter provided to the SHPO regarding the proposed Neurosciences Building is contained in Appendix A of this EA.

#### *Public Law 100-678*

Public Law (PL) 100-678 requires all federal agencies, including the VA, that construct or alter buildings to follow nationally recognized model building codes; consider local building, zoning, and similar laws; give due consideration to recommendations made by local officials; submit plans and notify local officials when constructing facilities.

On September 15, 1994, in compliance with Public Law 100-678 the VAMC submitted a letter regarding the proposed Neuroscience Building to the Director of the City and County of San Francisco Planning Department. In that letter the VAMC noted that the project would be designed in accordance with the latest editions of the VA Construction Standards, National Fire Protection Association Standards and Uniform Building Code. The City was requested to provide any comments regarding unique building code requirements that should be incorporated into the design of the project and to indicate whether it was interested in conducting

construction site inspections. Enclosed with the September 15 letter was a narrative description of the scope of the project.

On January 6, 1995 the City requested a meeting with the VAMC regarding the proposed building. On February 24, 1995 the VAMC met with the City Planning Director and President of the Planning Commission, representatives of the Mayor's office, and staff representing Senator Feinstein and Congresswoman Pelosi. On March 7, 1995 the Director of City Planning provided a letter to the VAMC outlining the provisions of Planning Code Section 304.5 applying to major institutions such as hospitals that requires the development of an Institutional Master Plan and Conditional Use review by the City Planning Commission of the conformity of proposed actions with the Institutional Master Plan. The Department of Veterans Affairs is not required by Public Law 100-678 to develop an Institutional Master Plan or to undergo Conditional Use Review.





## 2. DESCRIPTION OF ALTERNATIVES

The United States Department of Veterans Affairs Medical Center, San Francisco (VAMC) proposes to construct a two-level structure on its existing campus to house clinical staff offices, patient therapy meeting rooms, and a pharmacy for the Substance Abuse Treatment (SAT) Clinic and Post Traumatic Stress Disorder (PTSD) Program (Figures 3 and 4). The building would house uses currently conducted in Buildings 8 and 9 at the Medical Center. Building 9 (approximately 7,300 square feet) would be converted back to its original use as a duplex residence for select staff while Building 8 (approximately 25,000 square feet) would continue to provide psychological services absent the PTSD Program, which would move to the new structure. The project would be serviced by existing VAMC staff and treat existing patient loads. It would not require additional staffing or expand patient loads.

Prior to initiation of this proposal, several alternatives intended to address the deficiencies in the Substance Abuse Treatment (SAT) and Post Traumatic Stress Disorder (PTSD) treatment facilities were evaluated including demolishing the current structures and building a replacement structure either on that site or on an existing parking lot. The former was rejected because of budget limitations and because it would not provide adequate space. The latter was rejected due to its impact on the already limited parking supply available at the facility. Off-site alternatives were also considered, but were unsuccessful as detailed in Chapter 1.

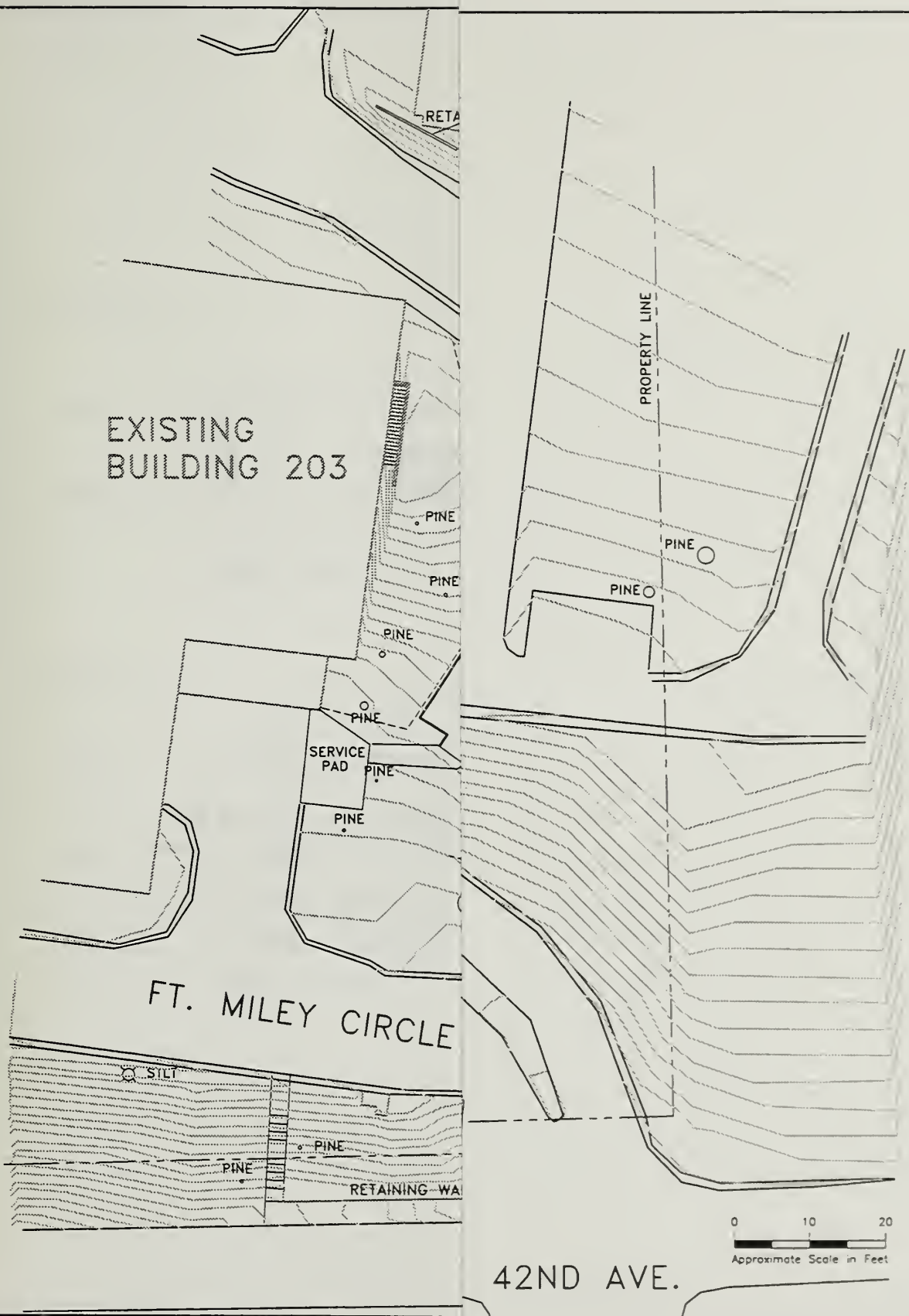
The following describes the alternatives under consideration for the proposed Neurosciences Building. Two structures of differing square footages located at the same site and the No Action Alternative are evaluated. Under the No Action Alternative the proposed building would not be constructed.

### 2.1 Preferred Alternative

#### *Proposed Facilities*

The proposed Neurosciences Building would be a two-story 14,700 square foot structure located on the western part of the south-sloping landscaped area bounded by Clement Street and the two branches of Fort Miley Circle (Figure 3). The new building would be smaller in scale than the adjacent Building 203, and would be set at an angle to that building. In addition, the building would be located as close to existing structures and as far from Clement Street as feasible on the selected site. Because of the slope of the site, the new structure would appear as a one-story building in views from the north while it would appear as a two story building in views from the south (Figure 4). No access points or walkways would be located on the building's southern side; instead, these would be located on the building's

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The preferred Alternative would construct a 14,700 square foot structure on a currently undeveloped site.

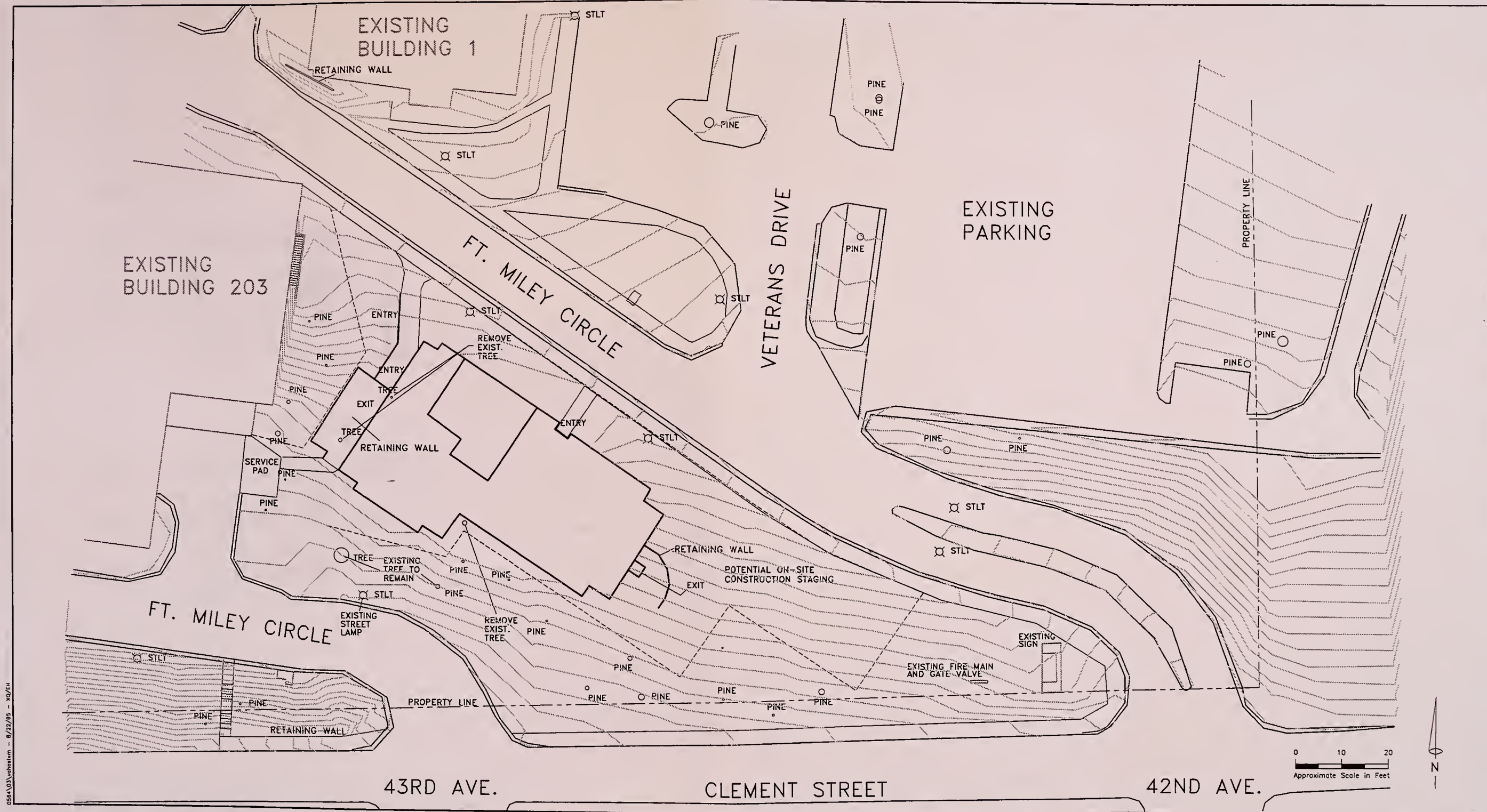
**TETRA TECH**

## *Preferred Alternative Site Plan*


San Francisco, California

**Figure 3**





The preferred Alternative would construct a 14,700 square foot structure on a currently undeveloped site.

- LEGEND:**
- PINE Existing Trees
  -  Proposed Neuroscience Building
  - ⊗ STLT Standord Lighting

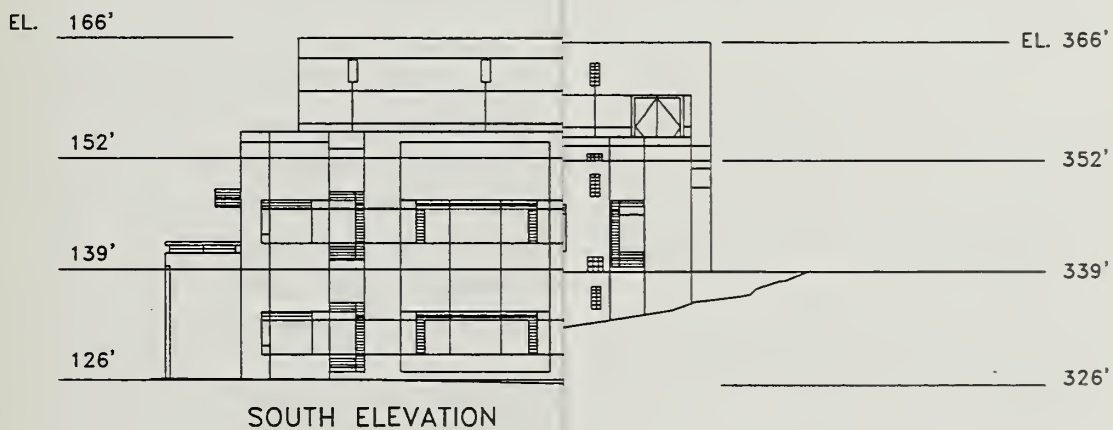
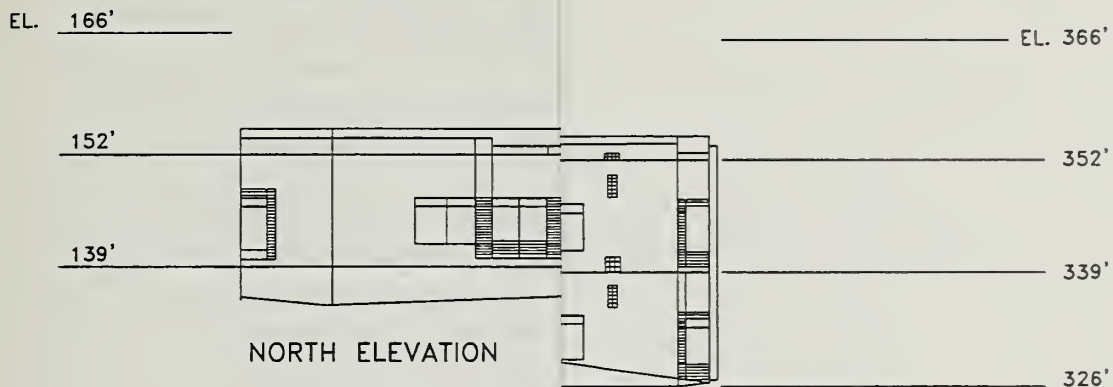
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# **Preferred Alternative Site Plan**

San Francisco, California

**Figure 3**





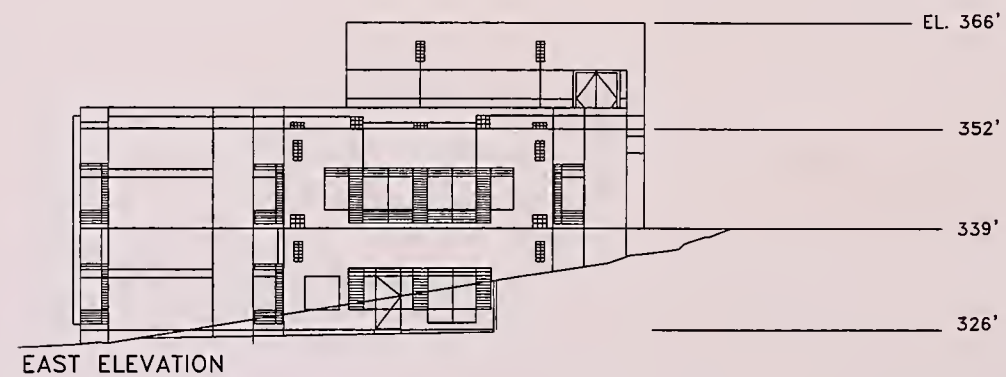
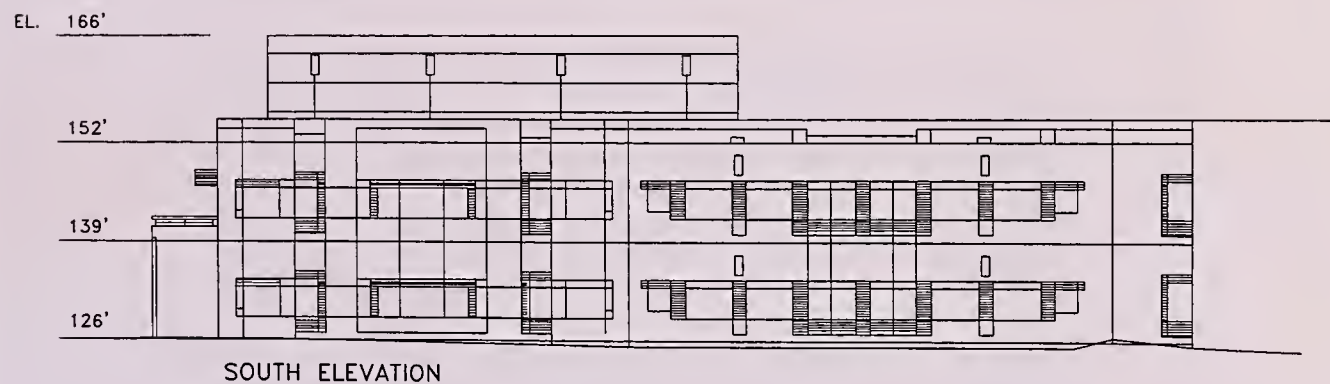
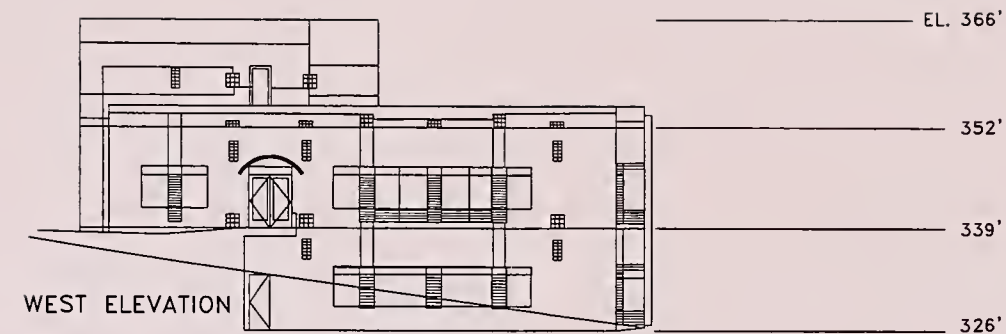
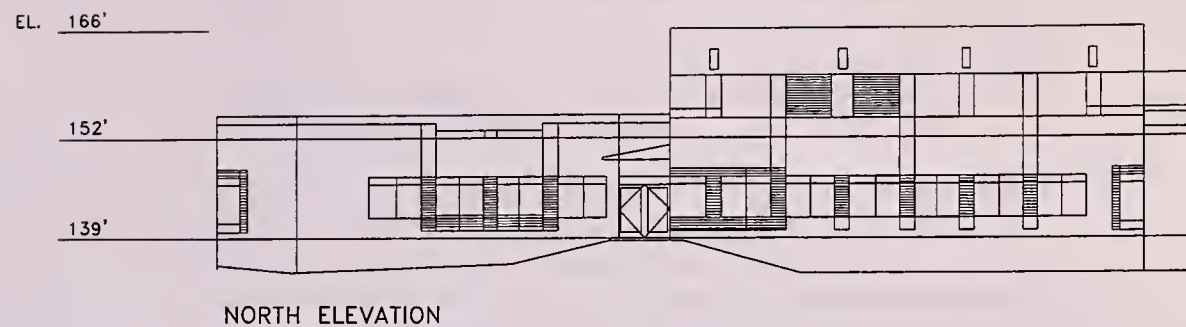
Because the building has been set into the existing slope, it would appear lower in height when viewed from the north than when viewed from the south.

**TETRA TECH**

## *Preferred Alternative Elevations*

San Francisco, California

**Figure 4**



Because the building has been set into the existing slope, it would appear lower in height when viewed from the north than when viewed from the south.

**TETRA TECH**  
*Preferred Alternative Elevations*

San Francisco, California

northern, eastern, and western sides. The eastern doorway would be used for emergency exiting only. A small mechanical equipment structure would rise above the primary roofline. Building faces and rooflines would be varied to break up the architectural massing and provide some variation and interest to the structure. Architecturally, the structure would be modern in style with colors and proportions intended to reflect those of the historic architecture of the older buildings on the site. It would be finished in cement plaster painted to visually conform with the exterior texture and colors of the older buildings on the campus. Windows would be framed in bronze colored aluminum. The building's rooflines would slope down and inward, and would be surrounded by a parapet.

Construction of the Neurosciences Building would require removal of three trees. The lawn area would be temporarily disturbed for construction staging but would be restored upon completion of construction. Project construction also would require the relocation of the park benches and removal of the existing concrete pathways across the site. The row of mature pine trees along the site's Clement Street frontage would be retained. The project would include landscaping along the low retaining walls on its northern and eastern sides.

The building would be supported by a lightweight steel frame on a concrete pad overlying compacted fill. A 1,300 square foot rooftop mechanical system structure housing the air handling unit and chillers, would be built at the north end of the building. No driveways or parking facilities would be provided at the new building. The structure would be built in conformance with the 1994 Uniform Building Code requirements for Seismic Zone 4. A retaining wall would be constructed extending for a length of approximately 20 feet along the northeastern side of the building, retaining the slope from the lower level exit.

Existing street lighting would be used for general exterior illumination. The project would include additional lighting at each entry. Interior lighting of the building would typically be fluorescent with incandescent lamps in observation rooms controlled by an energy management system. The windows would be covered to ensure privacy and minimize light spillover outside the building.

### *Construction Activities*

The project would be constructed over a seven-month period from November 1995 through about May 1996. Construction would require, in sequence, removal of site vegetation and abandoned underground utilities, excavation for the foundation and lower floor area, placement of engineered fill materials, placement of concrete foundations, and building the structure's frame, exterior, and interior. Approximately 10 feet of soil depth, 10 feet down from the proposed building would be excavated (2,200 cubic yards) and the material disposed of off-site. Construction would be limited to daylight hours and typically occur between 7:00 AM to 5:30 PM Monday through Friday with some weekend work. A maximum of approximately



50 construction workers would be on the site at any one time. Construction equipment would consist of earthwork machinery (front loaders, backhoes, soil/gravel transport, rollers, compactors, etc.) and construction machinery (forklifts, flatbed trucks, cement trucks, small cranes, etc.). No pile drivers are anticipated. As shown on Figure 3, during construction, a laydown (staging) area would be established on the lawn directly to the east of the site. The laydown area would be returned to lawn after completion of construction.

### *Facility Operation*

The Neurosciences Building would operate on weekdays from 7:00 AM to 6:30 PM and on weekends in the morning only on Saturday (8:00 AM to 12:00 PM) and on Sunday (9:00 AM to 11:00 AM). Approximately 45 staff would be located at the facility serving approximately 140 patients a day during weekdays with fewer during the weekends. Patient and staff parking would continue to occur on the VAMC property site and on the neighborhood streets. As noted earlier, no additional patient and staff loads would occur at the facility compared with those already at the VAMC.

Public access to and from the building would be controlled and would only be possible from its upper level. The entrance to the SAT Clinic would be away from open view, facing Building 203. The PTSD entrance would front Fort Miley Circle. The new building would have perimeter camera surveillance and internal security alarms, as well as an internal security office. Lower-level exits, visible from street level, would be alarmed emergency exits. Personnel traffic through these doors would occur only during emergencies.

Patients would be prohibited from loitering anywhere on the building grounds or in the neighborhood as a condition of treatment. VAMC Police and Security Services would be responsible for enforcing this restriction on the campus. These services are headquartered in Building 200, about 250 feet from the proposed building. The San Francisco Police Department has jurisdiction in the adjacent neighborhood, and the and GGNRA/US Park Service Park Police would patrol the adjacent GGNRA lands.

No loading docks are proposed for the facility, and deliveries would be by hand from other buildings at the VAMC or from vehicles parked in existing parking and loading areas and along the Fort Miley Circle access road.

## **2.2 Reduced Project Alternative**

This alternative would consist of a two-story building similar to the Preferred Alternative, but with a reduced floor area of about 12,500 square feet (Figures 5 and 6). This reduction in floor area would be achieved by reducing the length of the eastern extension of the building by about 50 feet. As with the Preferred Alternative, a 1,300 square foot second level mechanical area would be constructed. The building materials and organization of interior space would follow the same pattern as



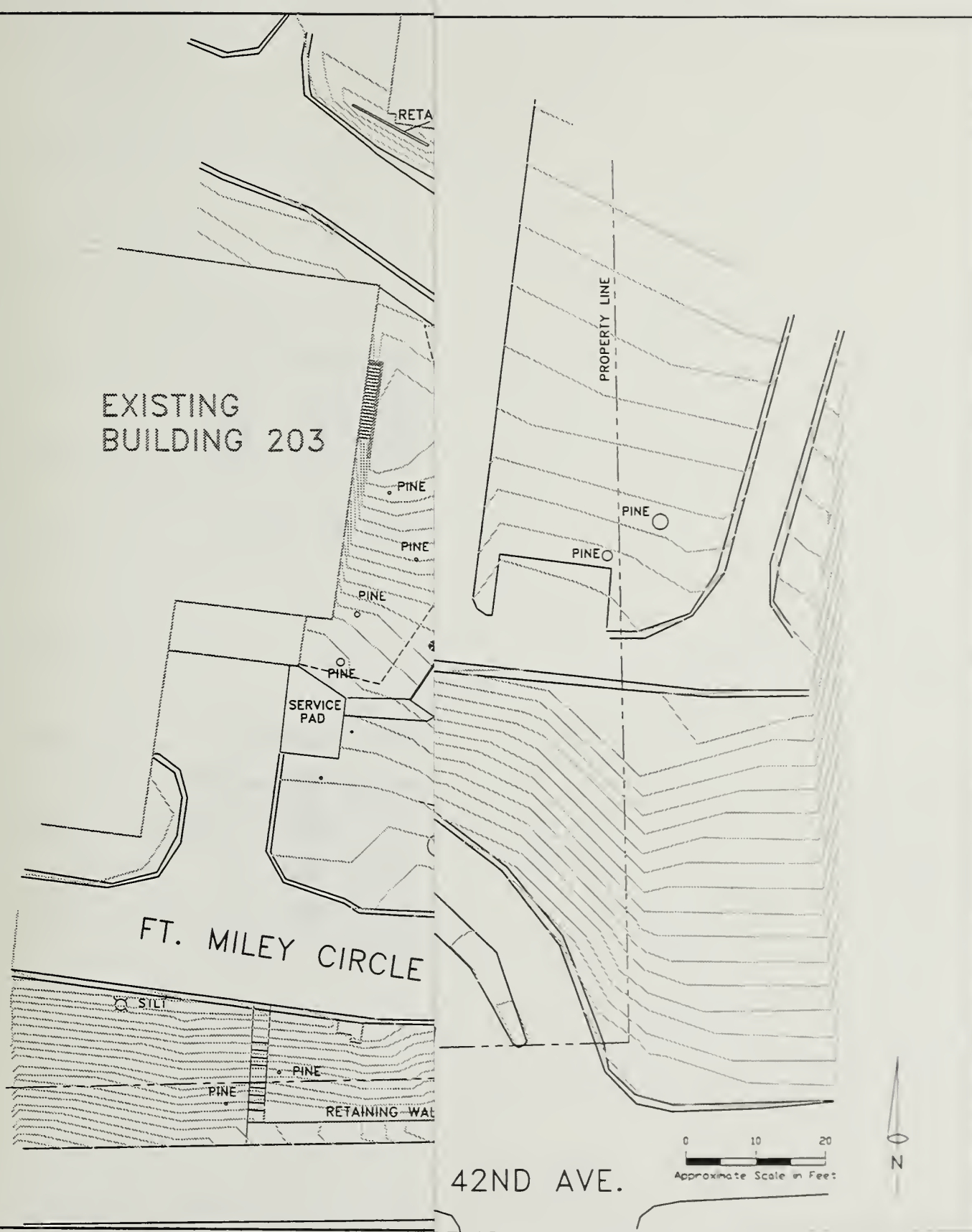
described for the Preferred Alternative, but with fewer offices being provided. This building would be constructed and operated as described for the Preferred Alternative. The numbers of staff and patients at the reduced facility would be less than the Preferred Alternative, because some staff may have offices elsewhere on campus, where they would support their caseload.

### 2.3 No-Action Alternative

Under this alternative the Neurosciences Building would not be constructed and the proposed SAT Clinic and PTSD Program services would remain at the currently deficient facilities located in Buildings 8 and 9 at the VAMC.



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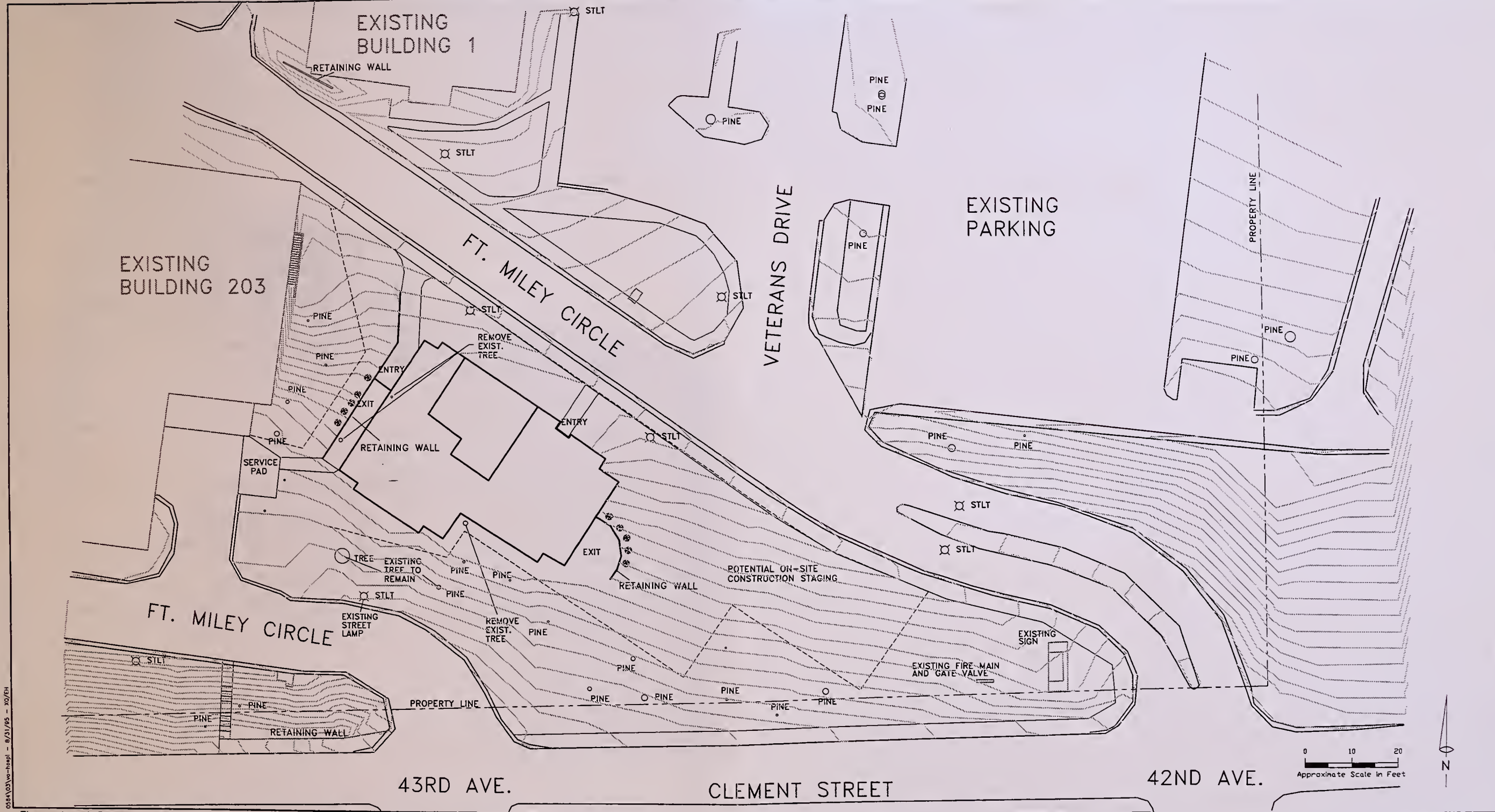


The reduced Project Alternative would construct a 12,500 square foot building on the currently undeveloped site.

**TETRA TECH**


## ***Reduced Project Alternative Site Plan***

San Francisco, California



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The reduced Project Alternative would construct a 12,500 square foot building on the currently undeveloped site.

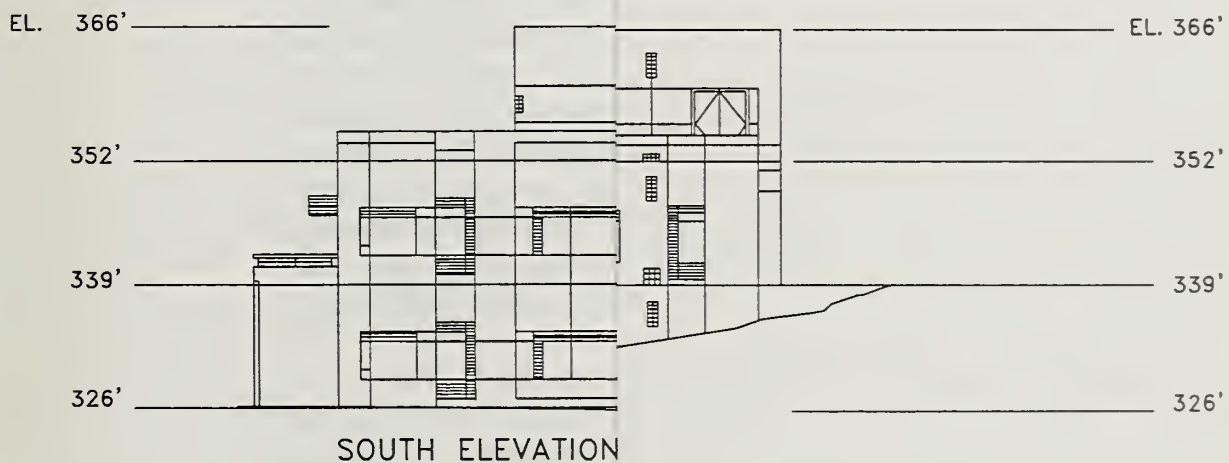
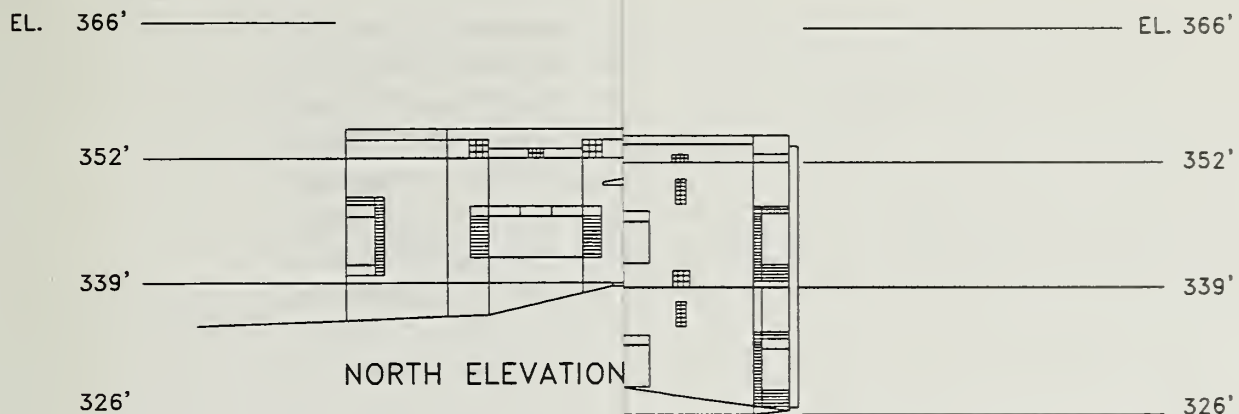
- LEGEND:**
- PINE Existing Trees
  -  Proposed Neurosciences Building
  - ⊗ STLT Standard Lighting

**TETRA TECH**

***Reduced Project Alternative  
Site Plan***

San Francisco, California



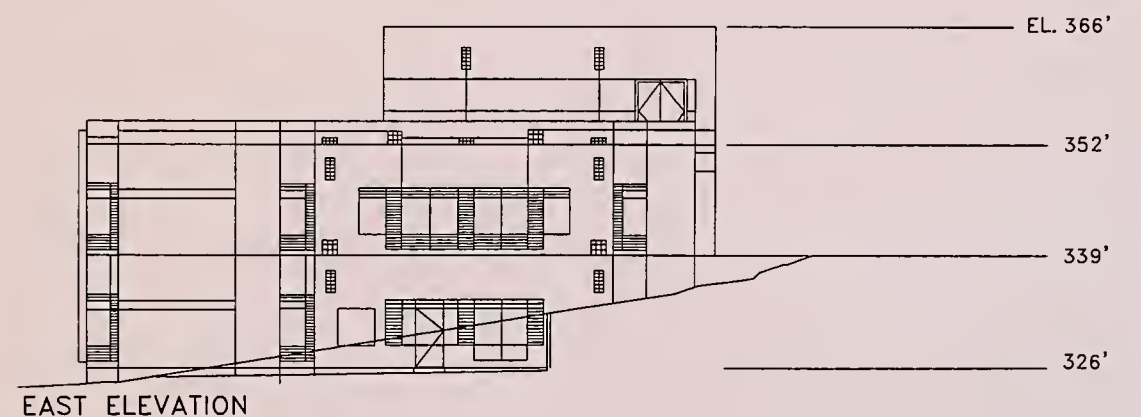
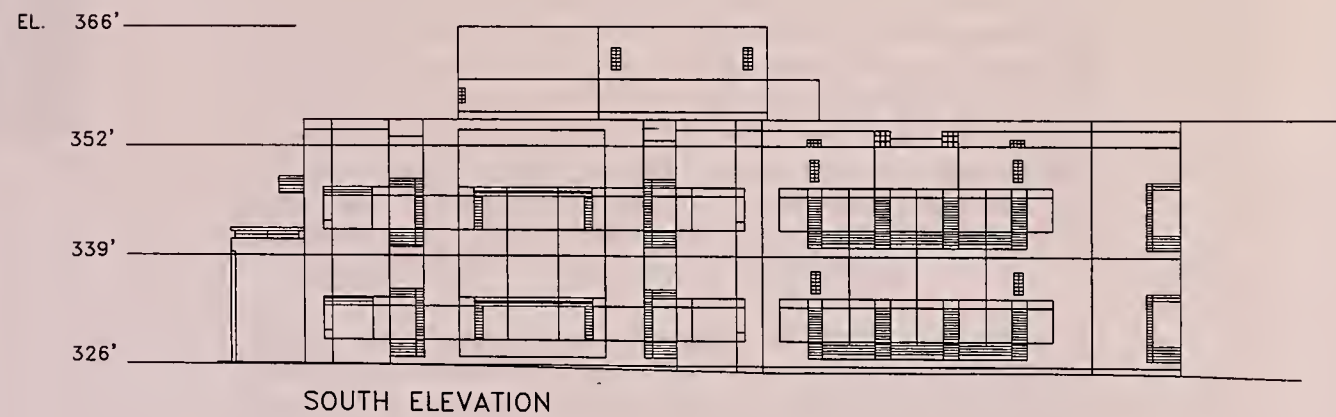
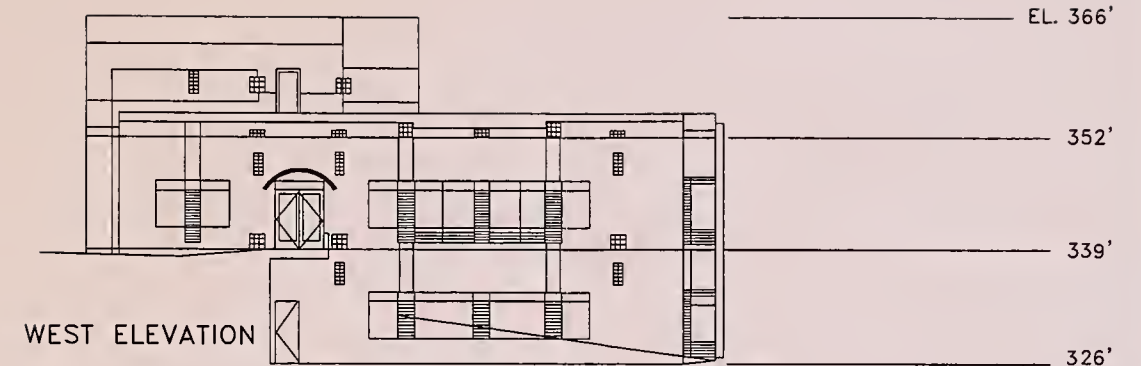
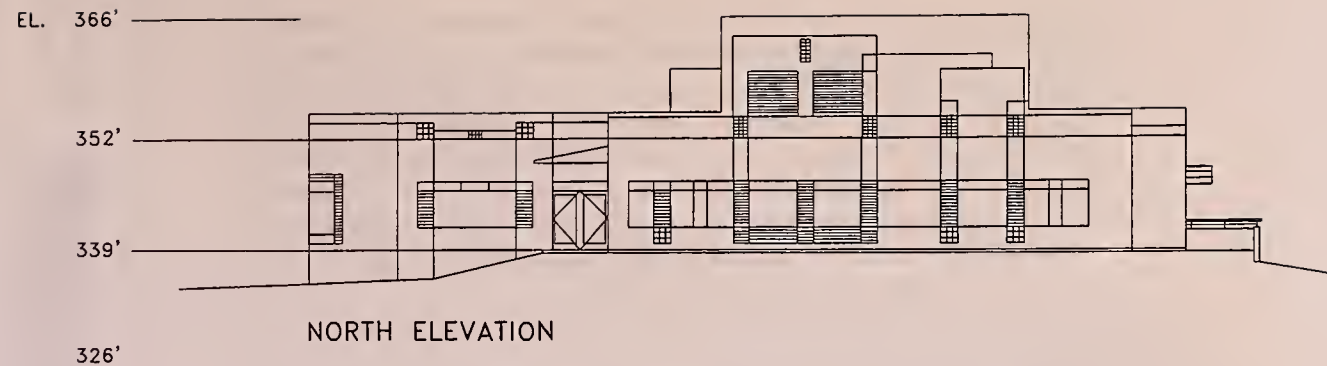


Because the building has been set into the existing slope, it would appear lower in height when viewed from the north than when viewed from the south. The reduction in square footage under this alternative reduces the mass of the building when viewed from the north and south.

**TETRA TECH**

## *Reduced Project Alternative Elevations*

San Francisco, California



Because the building has been set into the existing slope, it would appear lower in height when viewed from the north than when viewed from the south. The reduction in square footage under this alternative reduces the mass of the building when viewed from the north and south.

TETRA TECH

## Reduced Project Alternative Elevations

San Francisco, California

### 3. AFFECTED ENVIRONMENT

#### 3.1 Land Use and Planning

The proposed Neurosciences Building would be located in the western portion of the City of San Francisco on the existing campus of the Veterans Affairs San Francisco Medical Center (VAMC). This area of San Francisco is characterized by single- and multiple-family residential development, commercial corridors, institutional establishments, and recreational open space oriented towards the Pacific Ocean and Golden Gate. The VAMC campus is an institutional land use bordered on the south by residential land uses, and on the north, west, and east by open space/recreational uses. Photographs of the site and surrounding area are provided in Appendix B.

##### *Surrounding Land Use*

Residential land uses border Clement Street south of the project site, and continue southward to Geary Boulevard where land uses become more commercially oriented. A fire station is located on Geary Boulevard between 40th and 41st Avenues and the Seal Rock Inn is located at Geary and El Camino Del Mar. A variety of residential land uses are located in the area ranging from one- and two-story single-family residences on Clement between 40th and 42nd Avenues to three- to four-story apartment buildings scattered throughout the area. Most of the larger apartment buildings are on corners, with the smaller residences generally located mid-block. Most of the residential uses in the area are two- and three-story single-family houses and duplexes with garages on the lowest floor. This residential area is under the land use planning jurisdiction of the City and County of San Francisco.

The City of San Francisco's Lincoln Park borders the VAMC on the northeast and along part of its northern side. Lincoln Park extends north from Clement Street between 33rd and 40th Avenues. Major features of Lincoln Park include the Palace of the Legion of Honor and the Lincoln Park Golf Course and clubhouse. The primary access to this park is via Legion of Honor Drive, the northward extension of 34th Avenue.

The Golden Gate National Recreation Area (GGNRA) abuts the VAMC campus on the east, west, and north. Parking stables serving GGNRA vehicles and horses are located immediately east of the VAMC. The GGNRA is administered by the US Interior Department, National Park Service. This recreational area includes hiking trails, picnic areas, beaches, and vista points. The Cliff House, overlooking the Pacific Ocean at the end of Point Lobos Avenue, and Sutro Heights Park, an extension of GGNRA recreational space south of Point Lobos Avenue are also used extensively by the public.



GGNRA access in the vicinity of the VAMC is via the eastern and western stub of El Camino Del Mar. The western stub (the northward extension of 48th Avenue) provides access to the GGNRA adjacent to the eastern and northwestern edges of the VAMC. A gated service road extends east from that stub to the VAMC complex. The western stub of El Camino Del Mar dead-ends in a parking lot/vista point area near the USS San Francisco Memorial. A closed roadway provides pedestrian passage northeastward from this parking lot to the eastern stub of El Camino Del Mar (which dead ends at the Palace of the Legion of Honor), and affords views of the Lands End area of San Francisco, the Golden Gate, and the Marin Headlands.

#### *VAMC Land Use*

The VAMC facility land is developed with a variety of structures, paved parking areas and service roadways. The proposed site for the Neurosciences Building is located on the southeastern portion of the VAMC campus. Land uses surrounding the proposed site on the west are a small landscaped area and the five-story Building 203, which houses a number of medical and mental health services. Fort Miley Circle Road and Building 1 are immediately north of the building site. Paved parking lots are located across Fort Miley Circle to the northeast and east of the site. All VAMC facility land uses are under the jurisdiction of the US Department of Veterans Affairs.

#### *Plans and Policies*

The project site is located on federal land and therefore subject to federal laws and regulations including the Federal Coastal Zone Management Act, the National Historic Preservation Act and Public Law (PL) 100-678. Land uses under City jurisdiction to the south and east are subject to the City's Master Plan and Zoning Ordinance and state and local lands west and north of the project area are subject to provisions of the California Coastal Act of 1976, as amended. The federal lands, including the GGNRA are also subject to provisions of the Federal Coastal Zone Management Act.

*Federal Coastal Zone Management Act.* The Federal Coastal Zone Management Act applies to all non-federal lands within the coastal zone and to federal activities that affect non-federal lands within the coastal zone (Delaplaine, pers. comm., August 1, 1995). The coastal zone boundary appears to pass through the Neurosciences Building site, and, although the federally owned site itself would not be subject to CZMA provisions, spillover effects (such as parking) on nearby coastal zone lands under City jurisdiction from uses on that site would be subject to CZMA provisions. Thus, the proposed development on the site has been required to obtain a CZMA Conformity Determination from the California Coastal Commission (the implementing agency for the CZMA in California), which is provided in Appendix C. The Coastal Commission is particularly concerned with parking spillover effects and the potential impacts of such spillover on use of other coastal zone recreational facilities.

The City's Western Shoreline Plan, discussed above, serves as the Land Use Plan portion of the Local Coastal Program (LCP). While the LCP is required to comply with CZMA policies, federal actions are not subject to specific requirements of the LCP.

National Historic Preservation Act. The proposed Neurosciences Building is located close to the existing Fort Miley Historic District, which is listed on the National Register of Historic Places (Figure 7). The VAMC is therefore required to assess the effects of the undertaking on the National Register District. This assessment has occurred as part of this EA and is provided in Sections 3.5 and 4.5 of this document.

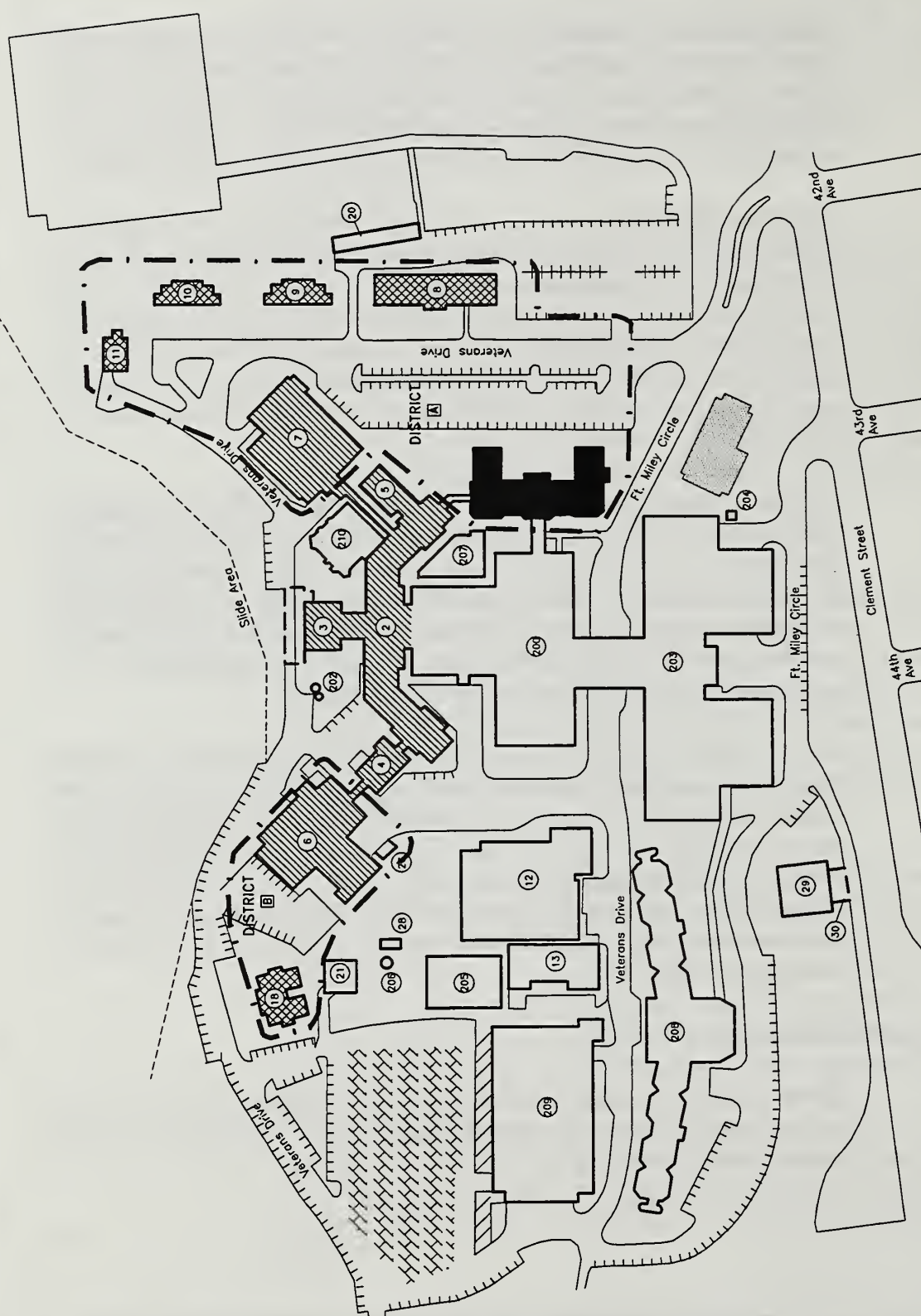
Public Law (PL) 100-678. Under this law all Federal agencies, including the Department of Veterans Affairs, which construct or alter buildings are required to follow nationally recognized model building codes; consider local building, zoning, and similar laws; give due consideration to recommendations made by local officials; submit plans and notify local officials when constructing facilities. While this law requires federal notification of local agencies and consideration of local interests, it does not grant local purview over federal agency decisions regarding construction of new facilities.

City Zoning Ordinance and Master Plan. The City's Zoning Ordinance designates the VAMC campus site, as well as the surrounding GGNRA, and Lincoln Park lands as a Public District. Surrounding City lands are designated primarily for single, multiple, and apartment residential uses (RH and RM districts). A small area of neighborhood commercial zoning occurs at the Geary Boulevard/Point Lobos Avenue intersection. Surrounding recreational lands are designated as within an Open Space District. The zoning generally is consistent with the existing land uses.

The City's Master Plan Recreation and Open Space Element and Western Shoreline Plan advocate continued recreational uses on GGNRA lands, and note that the VAMC parking should be provided on hospital grounds. The Western Shoreline Plan also has objectives and policies aimed at preserving the scale and character of the existing residential neighborhoods in that area. The City's Institutional Facilities Element, Policy 1, provides that institutional facilities should be located according to the Element's Institutional Facilities Plan. That plan indicates the VAMC campus as an institutional facility site.

### 3.2 Population and Socioeconomic Characteristics

The descriptions in this section are limited to the staff and patient population of the Medical Center, the staff and patient population of the existing SAT and PTSD programs, and to on-site housing.



The proposed building would be located close to the boundary of the National Register Historic District.

**LEGEND:**

- Historic District Boundary
- Proposed Neurosciences Building

**SIGNIFICANT STRUCTURES**

- Outstanding
- Important
- Contributing

TETRA TECH

# Fort Miley Historic District

San Francisco, California

**Figure 7**



### *Medical Center Population*

Almost 3,000 persons work at or visit the Medical Center in a typical 24-hour period. VAMC staff includes physicians, medical school/education staff, and students, as well as a large variety of other full-time, part-time, and volunteer positions. On average, about 175 physicians come to the Medical Center each day, along with about 105 medical school/education staff and about 150 students. Other full-time/part-time employees total about 1,930. Additionally, there are about 75 volunteers, 33 canteen workers, and 200 without-compensation employees at the facility each day. Over 300 patients visit the VAMC on a daily basis (VA Parking Analysis 1995).

A total of approximately 45 employees work in the SAT Clinic and PTSD Program that would be relocated to the proposed Neurosciences Building. These include psychiatrists and other medical doctors, psychologists, social workers, nurses, counselors, research associates and fellows, and other practitioners, technicians, and support staff.

### *Medical Center Housing*

Housing is currently provided on campus in Buildings 10 and 11. The Director resides in Building 10 while the Associate Director and the Chief of Medical Administrative Services share Building 11, which is a duplex. Building 9, currently being used for the SAT Clinic, was originally constructed as a duplex and would be converted back to its previous use following completion of the proposed Neurosciences Building.

## 3.3 Visual and Aesthetic Resources

### *Overall Visual Character*

The project site is located at the visually diverse northwest tip of San Francisco. The area contains a broad range of visual features ranging from the heavily vegetated and landscaped recreational and open spaces of the Golden Gate National Recreation Area and Lincoln Park, with their panoramic views of the Pacific Ocean and the Golden Gate, to intensely developed urban uses south of the VAMC, with its characteristic streetscape corridor views. The VAMC forms the visual transition between the intensely urban residential areas to the south and the mostly undeveloped open space areas to the east, west, and north. Views of and from this area vary substantially based on the location and orientation of the viewer.

The visual character of the VAMC campus is predominantly urban with the central portion of the campus dominated by large scale institutional-style buildings, and the periphery developed with paved parking lots and landscaped areas. A large open space area is present on the northern edge of the campus, and views to the north include unobstructed vistas of the Golden Gate. The campus area nearest the

proposed Neurosciences Building site is characterized by large multi-story buildings and paved parking areas. Small landscaped areas and areas of natural vegetation are located near Clement Street. Buildings on the campus in the project site vicinity range from historic art deco buildings to undistinguished modern buildings and additions. Numerous buildings exhibiting several architectural styles have been located in close proximity throughout the site.

The VAMC entrance on Clement Street at 42nd Avenue is well defined by signage and a landscaped entry. The 43rd Avenue entrance is less well defined and appears more as a service road than a major entry road.

#### *Project Site Visual Features*

The proposed Neurosciences Building site area contains several distinct visual elements including an open lawn area encompassing the northern and eastern portions of the site, a row of mature pines along Clement Street, and a small wooded area near its western edge. Several park benches have been placed along pathways on the lawn near the small wooded area.

The lawn area helps to define the entrance to the VAMC. The mature pines along the site's Clement Street frontage provide a visual buffer of the facility as viewed from the surrounding residential areas. The trees also form a unified visual element with similar trees along other parts of the Clement Street frontage, that screen views of the VAMC from Clement Street and in views northward from 42nd, 43rd, and 44th Avenues.

#### *Views of the Site*

Views of the site from the residential areas to the south are characterized by the large trees, other woody vegetation and moderately sloping park-like lawn area. In these views, the lawn area is clearly visible through the trunks of the trees fronting Clement Street. Portions of large institutional buildings on the campus (particularly Building 203 and Building 1) are visible in the background of views of the site from Clement. The well-traveled intensely developed urban streetscape of Clement Street is apparent in the foreground of all views of the site from nearby residential areas. Views of the site from the southwest include portions of the San Francisco Medical Center entry area. Because the site slopes up moderately from Clement, parking areas to the north are generally not visible in eye-level views from that street.

#### *Views from the Site*

Views from the site are characterized by the large institutional buildings of the VAMC to the north and west, roads and parking areas to the north-northeast and east, and the large trees and Clement Street residences to the south. The site also affords some more distant urban views down the 43rd Avenue corridor. The views

west are dominated by the undistinguished massing of Building 203, which are only somewhat softened by intervening vegetation. Views north are dominated by the more interesting but somewhat run down multi-story Art Deco (Building 1), and by the large adjacent parking lot with its attendant landscaping. Views of the residential areas to the south are characterized by older, well maintained, densely developed two- and three-story single- and multiple-family structures. Views of the middle and upper portions of these structures are substantially blocked by the intervening trees.

### 3.4 Transportation and Parking

#### *Site Access*

Primary access to the site and the VAMC overall is via Clement Street. There is no public access to the VAMC from the north, west, or east. Access to the complex is via two stop-sign-controlled intersections along Clement Street at 42nd and 43rd Avenues. A median exists at the 42nd Avenue entrance to separate incoming and outgoing traffic. The 43rd Avenue access is marked for separate entrance and exit lanes. Emergency access is provided via a roadway west of the VAMC. Regionally, north/south access to Clement Street is via Highway 101 and Highway 1 and east/west access is via Geary Avenue or Clement Street.

#### *Traffic Conditions*

According to a 1989 traffic study prepared by DKS Associates, about 5,100 vehicles travel to and leave from the VAMC in a 24-hour period. It was also found that highest traffic flows occurred in the AM and PM commute hours (7-8 AM and 4-5 PM), with relatively high traffic flows occurring to and from the facility during the entire 7:00 AM to 7:00 PM period. Nearly 3,000 vehicles per day used the 42nd Avenue access daily while over 2,100 vehicles per day used the 43rd Avenue access daily. About 20 percent of these trips were drop-offs and the remainder parked at or near the VAMC complex.

#### *Parking Supply*

A 1995 parking survey conducted by the VAMC indicated a total of 1,224 on-site parking spaces. These spaces are provided in 16 paved lots with 616 spaces, 184 curbside parking spaces, and a four-story parking structure with 424 spaces. Included in this total are 130 additional spaces recently created by the VAMC through restriping and additional curbside parking. The VAMC implemented a paid parking program for employees in April of 1990.

#### *Parking Demand*

Parking demand at the VAMC complex has long exceeded the available on-site parking supply. VAMC-prepared 1994 estimates of parking demand indicated that



typical daily operations at the facility generated a peak demand for 1,722 parking spaces (VAMC, 1994). Peak parking demand periods were found to be between 1:00 PM and 2:00 PM. The projected peak parking demand exceeds the available on-site parking supply by 498 spaces. This deficit is made up by workers and visitors to the facility using on-street parking in the local neighborhood and sometimes at the GGNRA parking lot west of the VAMC.

VAMC facility employees and visitor parking on neighborhood streets and at lots on the adjacent GGNRA land has been a concern of area residents, the City of San Francisco, and the VAMC administration. The City's Master Plan Recreation and Open Space Element contains a policy that VAMC parking should be provided on hospital grounds (City of San Francisco, 1994). To increase on-site parking supply the VAMC's 1995 Facility Development Plan propose construction of a new parking structure and a new parking lot after the year 2000 at the VAMC.

### *Transit*

Currently, one Muni line, the 38-Geary provides 24-hour, seven-days/week service between the VAMC and downtown San Francisco and the Transbay Terminal. In addition, three other lines, the 38L, 38AX, and the 18-46th Avenue, pass within one block of the Medical Center's 42nd and 43rd Avenue entrances. The 38-Geary stops at the VAMC/Fort Miley terminal during daytime hours (7:00 AM to 7:30 PM) daily, and by request on evenings (a request button at the VAMC/Fort Miley terminal can be used to call a bus during evening and night hours). This line runs buses every four minutes 24-hours/day. The 38L, 38AX, and 18 stop at various points along Geary and Point Lobos Avenue in the general vicinity of the Medical Center. The 38L and 38AX are express and limited stop versions of the 38 Geary line. The 18 runs generally north-south connecting points along the City's westernmost neighborhoods. The 1989 parking survey revealed that during the hours of 10:00 AM and 2:00 PM, there were a total of about 162 trips to and from the campus by bus.

### *Bicycle and Pedestrian Traffic*

The VAMC is accessible by bicycle and pedestrian traffic. The City's Western Shoreline Plan indicates a proposed bicycle trail along Clement Street past the site. All surrounding access streets have sidewalks suitable for pedestrian uses.

## 3.5 Cultural Resources

### *Applicable Regulations*

As a federal agency, the VAMC is responsible for compliance with the National Historic Preservation Act (NHPA) of 1966, as amended. Section 106 of the Act, "Preservation of Historic Properties" and its implementing regulation, 36 CFR 800,

requires federal agencies to perform three phases of work before an undertaking (i.e. project approval and development) is conducted. Phase 1 consists of the identification of any cultural resources located within the Area of Potential Effects (APE) of the undertaking. Phase 2 includes the evaluation of identified cultural resources for eligibility to the National Register of Historic Places (NRHP). During this phase, potential effects to eligible resources also need to be assessed. If the analysis determines that the undertaking would affect eligible resources, then Phase 3 mitigation must be conducted. Consultation with the State Historic Preservation Office (SHPO) and any interested parties also is required throughout the Section 106 process.

Much of the Phase 1 identification and Phase 2 evaluation requirements of Section 106 have been conducted for the proposed Neurosciences Building Project. Historic properties have been identified and evaluations of these properties resulted in the National Register nomination and listing of several 1930's structures as an historic district. Due to the close proximity of the proposed Neurosciences Building to the historic district, the VAMC is required to assess the effects of the undertaking on that district.

#### *Prehistoric Resources*

Prehistoric resources are physical properties resulting from human activities that predate written records and are generally identified as either isolated finds or sites. Prehistoric site types can include villages, temporary camps, rock shelters, milling stations, lithic scatters, quarries, burials and cremations, rock features and hearths, rock art, and bone scatters.

No cultural resources inventories to identify prehistoric resources have been conducted on the VAMC. No surface evidence of prehistoric sites has been observed and the probability for subsurface prehistoric resources is low.

#### *Native American Resources*

Native American resources are sites, areas and materials important to Native Americans for religious or heritage reasons. These resources may include villages, burials and human remains, cremations, rock art, rock features and spring locations.

The predominant Native American group known to have occupied the San Francisco and Monterey Bay areas is the Costanoan. The Costanoan tribe in 1770 was known to include eight different languages and approximately 50 separate and politically autonomous nations. The Ramaytush (or San Francisco Costanoan) language at that time was spoken by about 1,400 people along the San Francisco peninsula (Levy 1978).

Linguistic evidence suggests that the ancestors of the Costanoan moved into the San Francisco and Monterey Bay areas about A.D. 500. The movement of the Costanoan into the San Francisco area appears to coincide with the dates of several Late Horizon archaeological sites in the San Francisco bay region. The ancestors of the Costanoan were most likely the producers of the artifacts in these Late Horizon sites (Levy 1978).

Of primary concern are concepts of sacred space that create the potential for land use conflicts. Fundamental to Native American religions is the belief in the sacred character of physical spaces, such as mountain peaks, springs, and burial sites. Additionally, traditional rituals often prescribe the use of particular native plants, animals, or minerals. Therefore, activities that may affect sacred areas, their accessibility, or the availability of materials used in traditional practices, may be of concern. Native American consultation has not been conducted for the VAMC and the presence of Native American resources is undetermined. However, as a result of the intensive development of this area since 1893, intact Native American resources are unlikely.

### *Historic Resources*

Historic resources consist of physical properties that postdate the existence of written records and include architectural structures and archaeological features. Historic site types can include refuse concentrations, townsites, homesteads, agricultural features, ranching features, and features or artifacts associated with the early military use of the land.

The first known historic use of the land encompassing the VAMC occurred in 1867 when the City of San Francisco acquired the land from a local landowner and designated it as the City Cemetery Reservation. In 1893, the U.S. Army purchased 54 acres of the 200 acre reservation for use as a coastal defense battery. Designated as a subpost of the Presidio of San Francisco, the facility was originally known as the Reservation at Point Lobos. In 1900, it was renamed Fort Miley to honor Lieutenant Colonel John D. Miley, who had led the designing and installing of artillery emplacements around the San Francisco Bay (Stone Marraccini Patterson 1990).

During construction, most of the original army structures associated with Fort Miley were demolished to make room for the new hospital. The only army structure remaining from this period is Building 18, which underwent exterior renovations in 1934 to match the Art Deco design. The land surrounding the VAMC became part of the Golden Gate National Recreation Area in 1965 (Stone Marraccini Patterson 1990). Prior to 1994, marked graves associated with the 1867-1893 City Cemetery were moved to Colma, near Daly City. However, during the 1994 seismic retrofitting of the Palace of the Legion of Honor, north of the VAMC, several unmarked graves from the City Cemetery were encountered during grading and moved.



### *Architectural Resources*

Nineteen structures have been identified as historic resources (resources over 50 years of age). Evaluation of these resources for eligibility to the National Register of Historic Places (NRHP) has been conducted. Twelve of the structures were determined to be eligible to the National Register as a historic district (Fort Miley Historic District). The structures were determined to be eligible as “a significant component of the thematic group of Veterans Administration ‘set’ hospitals developed throughout the United States by the Federal Government in the second quarter of the 20th Century to provide an innovative and comprehensive system of health care for American veterans. The complex retains sufficient integrity to reflect the medical, functional, landscape, and architectural policies which underlie the thematic group (Stone Marraccini Patterson 1990). A significant component of the District is the Art Deco architectural style of the structures built or renovated in 1934 which still retain their architectural integrity. On May 23, 1980, the Fort Miley Historic District was listed on the National Register.

### *Archaeological Resources*

No cultural resources inventories to identify historic archaeological features have been conducted on the VAMC. However, a potential exists for historic resources associated with the original Fort Miley to occur as subsurface deposits. Types of historic buried deposits that may exist include cisterns, refuse concentrations, privies, and target pits. These type of archaeological features can provide important information on the adaptive strategies employed by military personnel at the turn of the century, including consumption patterns, resource distribution, discard patterns, and architectural or construction techniques, and the demography of the soldiers including social status, wealth, ethnicity and religion. However, the probability for intact buried deposits is believed to be low. In 1932, the current project area was graded and re-contoured. Approximately two to four feet was removed in the central portion of the current project area and a small knoll, approximately 20 feet high, was removed from the eastern portion. During the construction of Building 203 in 1976, the proposed project location was again graded. This action would have disturbed any intact subsurface deposits depending on the depth of ground disturbances. In addition, abandoned underground utilities still exist at the project location. The original placement of such utilities may have also affected any buried historic deposits.

## 3.6 Geology and Soils

The principal geologic formations found in the vicinity of the VAMC and their structural relationships are discussed in this section in the context of the regional geologic setting. Seismicity and slope stability are discussed in detail because they represent potential geologic hazards that could affect future development at the site.

### *Regional Geology*

Bay Area geology is dominated by the San Andreas fault system, a collection of northwest-trending strike-slip faults that includes the San Andreas fault, the San Gregorio fault, the Hayward fault, the Calaveras fault, and others, that have been active for about 30 million years (Wallace, 1990). The region that is now the San Francisco Bay was apparently high-standing until about one million years ago, when a combination of down-warping of the basin and rising sea levels lead to deposition of sediments in the valleys incised in the underlying Franciscan bedrock surface. During this time, the outlet of the San Francisco Bay moved from a channel west of San Bruno Mountain, to its present course through the Golden Gate (Rogers and Figuers, 1992).

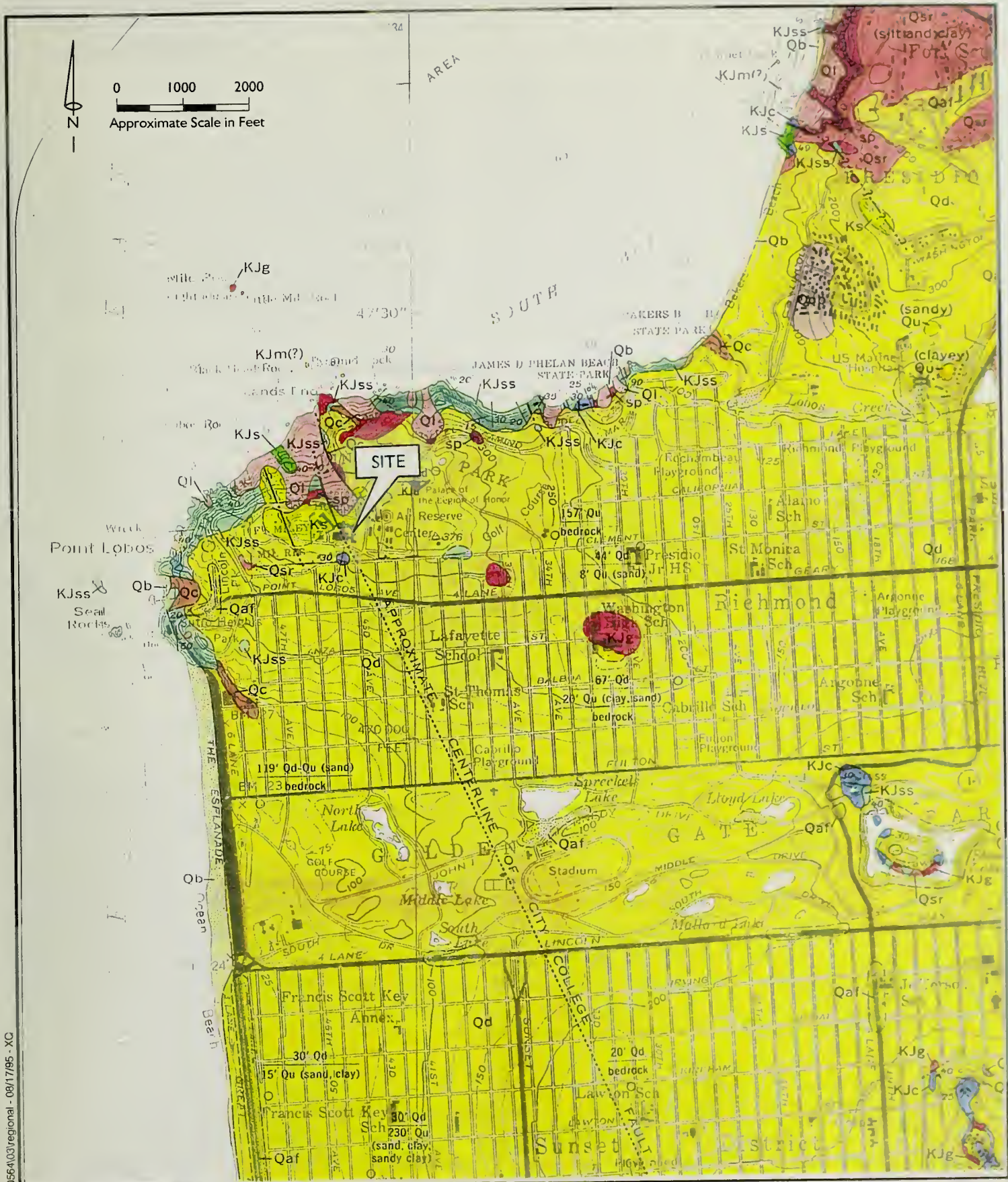
### *Site Geology*

Figure 8 shows the geology in the vicinity of the VAMC. The area lying east of the San Andreas fault is underlain by bedrock belonging to the Franciscan assemblage, which consists predominantly of marine sandstone, shale and radiolarian chert of Cretaceous age. The Franciscan has been subdivided into a number of "tectonostratigraphic terranes" or rock bodies that are thought to have had similar origins and histories (Wahrhaftig and Wakabayashi, 1989). The site lies within the "City College Shear Zone" described by Schlocker (1974), which corresponds to the "Central terrane" of Wahrhaftig and Wakabayashi (1989). The City College fault, which is thought to underlie the shear zone, is currently classified as a pre-Quaternary fault (Jennings, 1994). Bedrock beneath the site, and over most of the Sunset and Richmond Districts, is overlain by a covering of beach and dune sands, up to 150 feet thick. The sand is well-sorted, fine to medium grained, yellowish-brown to light gray.

Nolte and Associates performed a geotechnical study of the site in July, 1994. Three test borings were proposed drilled to a maximum depth of 56.5 feet. Twelve additional borings were originally proposed, but were not completed due to underground utilities and landscaping. A previous geotechnical study was performed by Lundgren and Associates (1971) for construction of the adjacent Building 203, and boring logs of both investigations are contained in the report prepared by Nolte and Associates.

The three borings drilled by Nolte and Associates encountered 1 to 3 feet of artificial fill overlying sand dune deposits approximately 35 feet thick. The sand dune deposits rest on weathered sandstone and clayey sandstone of the Franciscan formation. Up to 2.5 feet of the dune sand overlying the bedrock was saturated by ground water.





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The regional geology is dominated by the San Andreas fault system.

**Legend:**

Qaf - Artificial Fill  
Qb - Modern Beach Deposits  
Ql - Landslide Deposit  
Qsr - Slope debris and ravine fill  
Qd - Dune Sand

KJss/KJsh/KJs - Classic sedimentary rocks  
KJc - Radiolarian chert and shale  
KJg - Greenstone  
KJm - Metamorphic rock  
Ks - Sheared rocks, undifferentiated  
sp - Serpentine

## Regional and Site Geology

San Francisco, California

**Figure 8**



### *Seismicity*

The VAMC lies within a zone of mostly right-lateral strike-slip faults belonging to the San Andreas fault system. This system is approximately 44 miles wide in the San Francisco Bay Area (Wallace, 1990), and forms the boundary between the Pacific and North American coastal plates. The principal active faults, on which there is evidence of displacement during Holocene time (last 11,000 years), include the San Andreas, San Gregorio, Hayward, Rogers Creek, West Napa, Calaveras, Concord, and Green Valley Faults (Bortugno 1982). These faults are shown on Figure 9.

Incorporating data from the Loma Prieta earthquake of October 17, 1989, the U.S. Geological Survey (1990) estimates at 67 percent the probability of one or more large earthquakes (magnitude 7.0 or greater) on the San Andreas, Hayward or Rogers Creek Faults during the next 30 years (WGCEP 1990). Since the probability of earthquakes on other active faults is not included in this estimate, the 67 percent probability is considered to be a minimum probability for damaging earthquakes in the Bay Area.

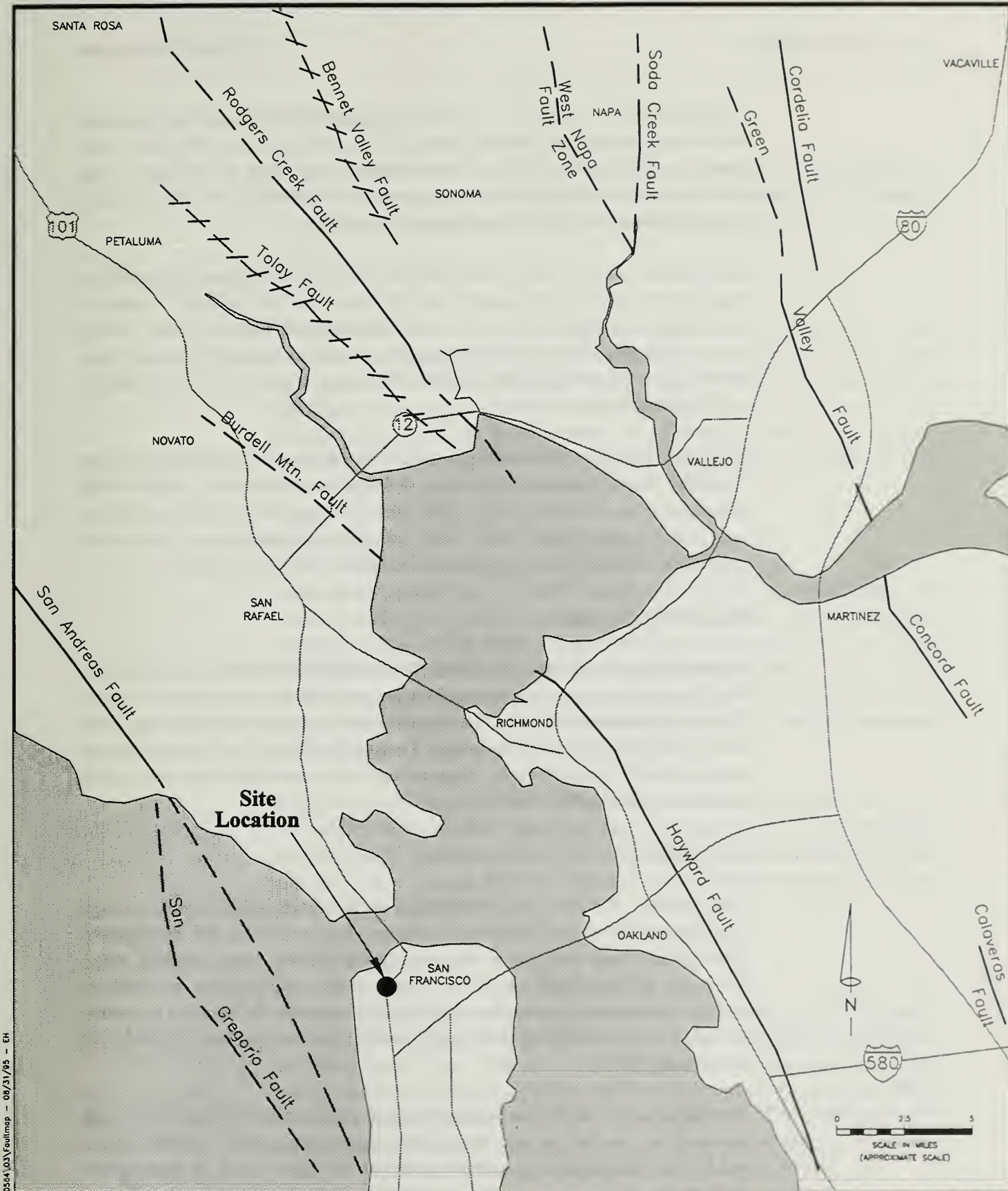
Earthquake intensity is an expression of the amount of ground shaking during an earthquake. Intensity depends on the origin of the earthquake, and the nature of the geologic materials at the location where the earthquake is felt. Generally, bedrock shakes the least, and loose, saturated materials shake more violently, because seismic waves are amplified by these materials.

Damage to structures depends not only on the intensity and duration of an earthquake, but on how the structure is built, and the direction of travel of seismic waves relative to the orientation of the structure. The proximity of the site to major earthquake faults means that seismic energy will be little attenuated should an earthquake occur on a segment of one of the active faults near the site.

Maximum credible earthquake magnitudes have been assigned to the San Gregorio and San Andreas faults of 7.7 and 8, respectively (Nolte and Associates, 1994). Nolte and Associates calculated that mean peak horizontal ground accelerations on the order of 0.5 times the acceleration of gravity could be experienced as a result of a maximum credible earthquake. Nolte and Associates concluded that subsidence due to strong ground shaking during an earthquake could be on the order of one inch.

### *Soils*

The most recent Soil Conservation Service (SCS) map of the area (Kashiwagi and Hokholt, 1991) shows that the site is underlain by the Sirdak, Urban Land soil unit. This soil underlies most of the Richmond and Sunset Districts of San Francisco. Urban land is defined as areas covered by roads, driveways, parking lots, houses, and other structures, which is underlain by soil that has been mixed or has been covered



The VAMC is located in a zone of mostly right-lateral strike-slip faults belonging to the San Andreas fault system.

#### LEGEND:

- Active Fault. Fault has evidence of surface displacement within the last 11,000 years.
- - - Active Fault concealed.
- / - Potentially Active Fault. Fault has evidence of surface displacement within the last 2 million years.
- / / - Potentially Active Fault concealed.

## Locations of Principal Active Regional Faults

San Francisco Bay Area

Figure 9



with fill material. Sirdak soils are very deep (greater than 60 inches) and somewhat excessively drained, on stabilized dunes. The soils are 90 to 98 percent sand throughout the profile, with dark brown sand over yellowish brown sand. These soils have a low available water capacity, and are only suited to the most drought-resistant plants. Barren areas are subject to soil blowing.

According to the SCS report, the main limitations for building on these soils are slope, low available water capacity, and the hazard of soil blowing. Erosion is considered a hazard in steeper areas. Revegetating disturbed areas around construction sites as soon as possible is recommended to control soil blowing. Slopes severely limit all types of building site development on these soils. Cutbanks in shallow excavations tend to cave.

Nolte and Associates (1994) concluded that the probability of landsliding and slope instability due to seismicity would be low at the site. They also concluded that excessive moisture intrusion due to poor surface drainage, leaking subsurface utilities, and over-irrigation could cause local settlement of foundations, necessitating installation and maintenance of surface and subsurface drainage provisions.

#### *Liquefaction Potential*

Liquefaction is the sudden loss of strength of a saturated cohesionless soil resulting from high water pressure between soil grains produced by intense ground shaking. This loss of strength leads to a "quick sand" condition in which objects can either sink or float depending on their density. Liquefaction does not occur where soils are not saturated by ground water. Liquefaction is not expected to occur at the site, because the water table is relatively deep.

#### *Slope Stability*

Slope stability is related to a combination of factors including rainfall, geology, steepness of slope, slope orientation, vegetation cover, seismicity, and development. Slope stability concerns include catastrophic slope failure from landslides, debris flows, and debris avalanches, as well as gradual processes such as creep, earthflow, or erosion. Catastrophic slope failure in susceptible areas may be triggered by seismic events, rainfall, undercutting of slopes by construction activities, and overloading of unstable deposits.

The deep, sandy soils that underlie the site are subject to caving, and have a high potential for erosion on cut slopes and shallow excavations. Under normal conditions, and gradual slopes, these conditions would not result in slope failure. Shallow slope failures may occur due to ground shaking.



### *Mineral Resources*

A mercury deposit is present near Land's End, north of the site (Bailey and Harden, 1975). However, mercury has not been commercially mined in San Francisco County. No other mineral resources have been identified near the site.

## 3.7 Water Resources

Water resources include surface water bodies such as bays, rivers, and ponds, and ground water occurring in soil or rock formations. The only significant water resource at the VAMC site is ground water, although surface water runoff occurs periodically due to storms. The following section focuses on the occurrence of ground water in the site vicinity based on information obtained from limited subsurface investigations performed in the area. The occurrence of surface water, in the form of storm water runoff is also described.

### *Surface Water*

Surface water includes bays and estuaries, lakes and ponds, rivers and creeks, and overland runoff of precipitation. There are no permanent surface water bodies on the VAMC site. The City of San Francisco's potable water is imported from the Hetch Hetchy Reservoir in the Sierra Nevada. Average annual precipitation in the vicinity of the site is approximately 15 inches per year (Kashiwagi and Hokholt, 1991). Most of the precipitation occurs between November and April. The average evaporation rate in the region is 4.5 feet per year.

Stormwater runoff is collected by the City of San Francisco's combined stormwater and sanitary sewer system. The discharge is treated by the City's wastewater treatment plant. Industrial facilities discharging legally to a combined system are not required to have a non-point source stormwater discharge permit under the Clean Water Act.

### *Ground Water*

Groundwater is defined as water occurring in soil or rock formations. Groundwater basins are soil or geologic features within which stored groundwater is interconnected and functions as a unit. The term "aquifer" refers to a water-bearing, permeable geologic unit that is capable of yielding significant amounts of water to wells. What constitutes a "significant amount" depends on the context. Less permeable water-bearing units are termed "aquitards" if ground water moves through them very slowly, or "aquicludes" if they present a barrier to ground water flow.

The upper 30 feet of soils underlying the building site consist of highly permeable dune sand. Precipitation or runoff that falls on unpaved surfaces is expected to percolate relatively rapidly through these materials. The percolating ground water is

expected to move vertically downward until it reaches the water table, which occurs just above the contact with the Franciscan formation bedrock. Previous borings completed at the site in July, 1994 indicated 0 to 2.5 feet of saturated thickness of the sand overlying the weathered bedrock, in the depth range of 31 feet to 39 feet below the ground surface (Nolte and Associates, 1994). Ground water flows are expected to generally mimic the surface topography, and are probably constrained by bedrock topographical relief. Based on the elevations at which ground water was first encountered in the boring locations, it appears that ground water flow beneath the site may be toward the southeast. However, these elevations are only qualitative, and may not accurately represent static water table elevations. Ground water elevations may vary seasonally. Based on topography, ground water downgradient of the site probably flows west, toward the former Sutro Baths, parallel with Geary Boulevard.

#### Ground Water Quality

A review of regulatory agency records pursuant to a Phase 1 Site Assessment of the property (Tetra Tech, 1995) did not reveal any known contaminant release sites upslope (presumed upgradient) of the site. The watershed upslope of the site includes the VAMC facility (northwest) and the Air Reserve Center (northeast). The area upslope of the site has historically been used as a cemetery. The upland portions of the watershed, in which most of the recharge probably occurs, lie within Lincoln Park.

#### *Flood Hazards*

##### Flooding

The site does not lie within a 100-year flood plain. Based on the slope of the site, it is not likely that the site would be affected by flooding.

##### Erosion

Site soils are subject to erosion on steeper slopes, which may be increased during construction activities due to excavation or removal of vegetation.

### **3.8 Biological Resources**

Biological resources addressed in this analysis include vegetation, wildlife, sensitive species, and sensitive habitats on the site and in surrounding areas. Biological resources are discussed in this assessment because lands surrounding this facility have the potential to support sensitive habitats and sensitive species. Information regarding biological resources was obtained from the California Natural Diversity Database (CDFG 1995), the EA for New Parking (VAMC 1980), and a site visit to the proposed building location at the VAMC on August 2, 1995.

### Vegetation

The building site is currently covered with vegetation typical of urban areas, consisting of a maintained lawn and planted trees. Tree species at the site include Monterey pine (*Pinus radiata*), coast live oak (*Quercus agrifolia*), and California bay (*Umbellularia californica*). There is a small area covering approximately 30 square feet that has an understory of English ivy (*Hedera canariensis*) and California blackberry (*Rubus ursinus*).

### Wildlife

Wildlife present at the site are typical of that found in urban areas in the San Francisco region and include invertebrates, reptiles, birds, and mammals. No invertebrate surveys have been done at the VAMC. Reptile species common to the area include the western fence lizard (*Sceloporus occidentalis*) and gopher snake (*Pituophis melanoleucus*). Bird species detected at the facility include the common crow (*Corvus brachyrhynchos*), European starling (*Sturnus vulgaris*), house sparrow (*Passer domesticus*), and rock dove (*Columba livia*). Mammal species common to the project area include the house mouse (*Mus musculus*) and California ground squirrel (*Spermophilus beecheyi*).

### Sensitive Species

Sensitive species include those that are listed by the U.S. Fish and Wildlife Service (USFWS) or by the California Department of Fish and Game (CDFG) as endangered, threatened, proposed for endangered or threatened status, or candidate species for endangered or threatened status. Also included as sensitive species are those plants listed by the California Native Plant Society (CNPS) and species of special concern to the CDFG. Table 1 lists sensitive species known or suspected in the area of the VAMC. This discussion focuses on those species listed by either the USFWS or CDFG as endangered or threatened.

Plants. Nine plant species listed by the USFWS or CDFG as endangered or threatened are found in the vicinity of the VAMC. Due to the highly disturbed nature of the vegetation at the VAMC, none of these plants are likely to inhabit the proposed project site.

A number of these plants are associated with specific habitats found at the Presidio, located approximately two miles to the east of the VAMC. These include the San Francisco lessingia (*Lessingia germanorum*), San Francisco popcorn flower (*Plagiobothrys diffusus*), marsh sandwort (*Arenaria paludicola*), Presidio manzanita (*Arctostaphylos hookeri* ssp. *ravenii*), Marin western flax (*Hesperolion congestum*), and Presidio clarkia (*Clarkia franciscana*). These plants are unlikely to be found at the VAMC because habitats for these species are not found there.



TABLE 1  
SENSITIVE SPECIES NEAR THE VAMC

Common Name	Scientific Name	Federal Status	State Status	CNPS Status	Occurrence at VA
<b>ENDANGERED AND THREATENED SPECIES</b>					
<i>Plants</i>					
San Francisco lessingia	<i>Lessingia germanorum</i>	C1	E	1B	U
white-rayed pentachaeta	<i>Pentachaeta bellidiflora</i>	E	E	1B	U
San Francisco popcorn flower	<i>Plagiobothrys diffusus</i>	C2	E	1B	U
marsh sandwort	<i>Arenaria paludicola</i>	E	E	1B	U
Presidio manzanita	<i>Arctostaphylos hookeri</i> ssp. <i>ravenii</i>	E	E	1B	U
Marin western flax	<i>Hesperolion congestum</i>	T	T	1B	U
Presidio clarkia	<i>Clarkia franciscana</i>	E	E	1B	U
beach layia	<i>Layia carnosa</i>	E	E	1B	U
Monterey spineflower	<i>Chorizanthe pungens</i> var. <i>pungens</i>	T	none	1B	U
<i>Invertebrates</i>					
mission blue butterfly	<i>Icaricia icarioides missionensis</i>	E	none	none	U
bay checkerspot butterfly	<i>Euphydryas editha bayensis</i>	T	none	none	U
<i>Amphibians and Reptiles</i>					
California red-legged frog	<i>Rana aurora draytonii</i>	PE	CSC	none	U
<i>Birds</i>					
California black rail	<i>Laterallus jamaicensis coturniculus</i>	C2	T	none	U
bank swallow (nesting colony)	<i>Riparia riparia</i>	none	T	none	U
<b>OTHER SENSITIVE SPECIES</b>					
<i>Plants</i>					
adobe sanicle	<i>Sanicula maritima</i>	C2	R	1B	U
San Francisco gumplant	<i>Grindelia hirsutula</i> var. <i>maritima</i>	C2	none	1B	U
San Francisco campion	<i>Silene veracunda</i> ssp. <i>veracunda</i>	C2	none	1B	U
Franciscan manzanita	<i>Arctostaphylos hookeri</i> ssp. <i>franciscana</i>	C2	none	1A	U
alkali milk-vetch	<i>Astragalus tener</i> var. <i>tener</i>	none	none	1B	U
San Francisco owl's-clover	<i>Triphysaria floribunda</i>	C2	none	1B	U
fragrant fritillary	<i>Fritillaria liliacea</i>	C2	none	1B	U
Diablo rock-rose	<i>Helianthella castanea</i>	C2	none	1B	U
Point Reyes bird's-beak	<i>Cordylanthus maritimus</i> ssp. <i>palustris</i>	C2	none	1B	U
San Francisco wallflower	<i>Erysimum franciscanum</i>	C2	none	4	U
<i>Invertebrates</i>					
bumblebee scarab beetle	<i>Lichnanthe ursina</i>	C2	none	none	U
California brackishwater snail	<i>Tryonia imitator</i>	C2	none	none	U
<i>Birds</i>					
double-crested cormorant (rookery)	<i>Phalacrocorax auritus</i>	none	CSC	none	U
<i>Mammals</i>					
Townsend's western big-eared bat	<i>Plecotus townsendii townsendii</i>	C2	CSC	none	U
California mastiff bat	<i>Eumops perotis californicus</i>	C2	CSC	none	U

Source: CDFG 1994a, 1994b, 1994c; USFWS 1995a; 1995b

<u>Federal Status</u>	<u>State Status</u>	<u>Occurrence at VA</u>	<u>CNPS Status</u>
E = Endangered	E = Endangered	P = Possible	1A = Plants believed extinct
PE = Proposed endangered	T = Threatened	U = Unlikely	1B = Plants rare and endangered in California and elsewhere
T = Threatened	R = Rare		4 = Plants of limited distribution
C1 = Category 1 candidate	CSC = California species of special concern		
C2 = Category 2 candidate			



**DEPARTMENT OF VETERANS AFFAIRS**  
**Medical Center**  
**4150 Clement Street**  
**San Francisco CA 94121**

September 15, 1995

In Reply Refer To:

SAN FRANCISCO MAIN LIBRARY  
CIVIC CENTER BRANCH  
San Francisco, CA 94102  
Attn: Head Librarian

Dear Sir/Madam:

The U.S. Department of Veterans Affairs San Francisco Medical Center announces the availability of the Veterans Affairs Medical Center Neurosciences Building Draft Environmental Assessment (EA) and the scheduling of a neighborhood public meeting to receive comments on the report. The EA has been prepared in conformance with the National Environmental Policy Act (NEPA), and VA Regulations, Title 38 CFR, Part 26, Environmental Effects of VA Actions, which implements NEPA at VA facilities. The EA for the proposed 14,700 gross square foot Neurosciences Building project has been prepared to better inform local agencies and concerned citizens of the project's environmental effects.

Copies of the Draft EA are available at the following libraries:

1. Richmond branch, 351- 9th Avenue San Francisco.
2. VA Medical Center, 4150 Clement Street 2nd Floor, Building 6, San Francisco.
3. San Francisco Main Library at Civic Center.

Individual copies of the Draft EA may be obtained any weekday from 8:00 a.m. to 4:30 p.m. from the Public Affairs Office, San Francisco VA Medical Center, Room 288, Building 2. For more information contact Ms. Gene Gibson at (415) 750-2250.

A public meeting has also been scheduled to receive written and verbal comments on the proposed Neurosciences Building Draft EA. Representatives from the VAMC and the consulting firm that prepared the EA will be available at the meeting to discuss the environmental document. The public meeting will be held:

DATE: October 2, 1995 at 7:00pm  
WHERE: VAMC, 4150 Clement Street , San Francisco  
Building 200 Teak Conference Room 1A-122





The white-rayed pentachaeta (*Pentachaeta bellidiflora*) is found in valley and foothill grasslands, often on serpentine soils. This species is unlikely to be found at the VAMC because of the lack of suitable undisturbed habitat. The nearest record of this species is over three miles from the hospital site in Marin County.

The Monterey spineflower (*Chorizanthe pungens* var. *pungens*) is found on sandy soils within the bay area. The nearest record of this species, recorded in 1866, was over twenty miles from the site in the city of Alameda. The sandy soils found at the VAMC may once have supported this species but the development of the area makes it unlikely for the species to exist there now.

The beach layia (*Layia carnosa*) requires open areas of sand with sparse vegetation cover and is found in the northern foredune plant community, not available at the VAMC. The nearest record of this species is from a population that existed at sand dunes in San Francisco and was last detected in 1904.

Wildlife. Two butterflies, one amphibian, and two bird species that are state or federally listed as endangered or threatened have been detected near the VAMC. These species are discussed separately below. None of these species are likely to inhabit the proposed project site.

The mission blue butterfly (*Icaricia icarioides missionensis*) is sustained by three species of perennial lupine (*Lupinus* sp.). This butterfly only exists in limited areas of San Francisco, San Mateo, and Marin counties. Lupines are not found at the VAMC but are present within one-half mile in Lincoln Park. The nearest record of this species, recorded in 1977, is approximately three miles to the southeast, in the Twin Peaks area of the city.

The bay checkerspot butterfly (*Euphydryas editha bayensis*) historically inhabited the bay area and has largely been extirpated from the region. This species lays its eggs on native plantain (*Plantain erecta*) and feeds mostly on plantain and owl's clover (*Castilleja* sp.). The bay checkerspot butterfly is unlikely to inhabit the VAMC because these plant species are not found at the facility. The closest known location of this species, recorded in 1980, is approximately three miles from the site in the Twin Peaks area.

The California red-legged frog (*Rana aurora draytonii*) requires a permanent or semi-permanent pond or slow-moving water source with deeper pools and aquatic vegetation in which to breed. This species is unlikely to inhabit the VAMC because suitable habitat does not exist on the facility. The closest known location of this species, recorded in the 1940s, is less than one-half mile from the site.

The California black rail (*Laterallus jamaicensis coturniculus*) inhabits northern coastal saltmarsh areas not present at the VAMC. The closest known location of this species, recorded in 1929, is over three miles from the site in Marin County.

Bank swallows (*Riparia riparia*) nest only in excavated burrows in banks, bluffs or cliffs along lakes, streams, and coasts. The common cliff swallow (*Hirundo pyrrhonota*) was observed during a site visit to the VAMC but no bank swallows were detected. Lincoln Park may offer nesting habitat for the bank swallow but no suitable habitat is present at the hospital. The nearest record of this species, recorded in 1960, was at Ocean Beach approximately two miles from the hospital.

#### *Sensitive Habitats*

No sensitive habitats are present on or adjacent to the VAMC.

### 3.9 Public Services and Utilities

#### *Public Services*

##### Security

The VAMC provides its own police force for the protection and safety of the facility staff, patients, and visitors and the protection of buildings and grounds. The Police and Security Office is headquartered in Building 200, on the ground level. The Security Office as a matter of course works with the San Francisco Police Department and the U.S. National Park Service Police as needed. The VAMC Security Office has a required aid agreement with the Park Service police.

##### Fire Protection Services

The VAMC is provided fire protection services by the San Francisco Fire Department (SFFD). The nearest SFFD station serving the facility is at Geary and Point Lobos, about three blocks from the facility.

#### *Utilities*

##### Water Supply

Potable water for the VAMC is obtained from the City of San Francisco. The quality of the water supply is generally high, derived as it is from Sierra Mountain snowmelt collected in the city owned Hetch Hetchy Reservoir and delivered to the Bay Area by gravity pipeline.

The VAMC's water system is connected by two 6-inch lines to the city's water main in Clement Street at 45th and 42nd Avenues. The first source line is routed through a 500,000 gallon reservoir and pumped through 10-inch lines to a VAMC water line loop. The second source line is routed through presently inoperative pumps to the loop via a 4-inch line. Based on 1990 conditions it was recommended that the second water supply line be relocated, as well as a portion of the water supply loop north of

Building 25 that was threatened by continuing earth movement along an active slide (Stone Marraccini Patterson 1990).

The VAMC maintains a 48-hour water supply (approximately 500,000 gallons) in the reservoir and water towers on station. Water is pumped from the reservoir to the tower using one main pump and two backup pumps. One backup pump is powered by electricity, the other by diesel. The water tower holds 40,000 gallons, or approximately four hours supply. The existing elevated water tank between Buildings 205 and 206 has been anchored and seismically braced to meet current code requirements. The VAMC has identified emergency measures to be followed should there be a sudden loss of city water. Installation Plumbing, Mechanical and Facilities Supervisors are responsible for ensuring an adequate supply of water to maintain operations and the Plumbing Shop is responsible for water distribution.

The Mechanical Shop is responsible for the operation and maintenance of both electric and diesel powered pumps. In the event of a pump failure the backup electric pump will automatically kick in, and in the event of an electric power failure to the pump house the diesel powered fire pump is designed to provide automatic backup. This diesel pump can also be operated manually. Water loop valves are cycled quarterly to prevent valve stems from seizing and to ensure proper valve seating.

The facility maintains a chlorine level of .1 to .4 PPM, and ten water samples are taken weekly from different locations and tested for chlorine. Hot water is maintained at 140 degrees F at the holding tanks and 130 degrees F at the tap.

#### Sewers

The existing sanitary sewer system consists of a series of pipes up to 12 inches in diameter that connect and feed into the San Francisco City combined sewer system in Clement Street south of the site. The VAMC is authorized to discharge to the city system by permit (Permit No. 95-0535, June 18, 1995). Historically, the sewer system has experienced no backing up or clogging (Stone Marraccini Patterson 1990).

To provide emergency storage, several holding tanks are located throughout the VAMC property. All connections to the city system are routed through these holding tanks to better enable the VAMC to function after an earthquake.

Sewer manholes are opened quarterly to ensure that they are clear of debris and vegetation and to spot any damaged brick or concrete works. The grease trap near the VAMC is maintained once a year by on-site maintenance staff. Sewer maintenance chemicals are added quarterly to prevent mud buildup and intrusion of tree roots. In the event of a major sewer backup that cannot be corrected on station, a commercial drain service is retained for round the clock response.



Stormwater System

The storm drainage system primarily consists of a series of pipes up to 12 inches in diameter and drain tiles that feed into the combined city sewer system in Clement Street. In addition, storm water from much of the north end of the site drains to outfalls that daylight in the zone of the active slide or is collected as reclaimed water in an underground cistern to provide irrigation. The storm system adequately drains the site (Stone Marraccini Patterson 1990).

Steam Generation and Distribution System

VAMC buildings, with the exception of Building 200, are steam heated. The steam system is powered by three gas and oil fired steam boilers which supply 100 psi steam throughout the site via a steam tunnel system. System pressure is reduced at each building for use within that building. The condensate return system consists of individual receivers and pumps in each building which pump the condensate back to the central plant. The service to Building 200 is supplied by a direct buried pipeline.

Electrical Systems

The VAMC receives electrical power from Pacific Gas and Electric (PG&E) at 12KV from two separate points of service to the dual feed primary metering switchgear. The two feeds are reportedly supplied from the same overhead circuit (Stone Marraccini Patterson 1990). The 12KV feeds substations in the basement of Building 203 which provide 480 volt secondary power for Building 203 and 4160 volt primary to feed the older substations.

Gas

The site is served from a 4-inch PG&E gas main connection near the intersection of 45th Avenue and Clement Street. A 6-inch main then distributes gas to a location near Building 12 where it branches into three 4-inch pipes serving Buildings 12, 3 and 205. There are two earthquake valves on the site, one at the SE corner of Building 12 and one at the SW corner of Building 205.

### 3.10 Air Quality and Climatology

The region of influence (ROI) appropriate for air quality issues varies according to the type of air pollution being discussed. Primary pollutants such as carbon monoxide and directly emitted particulate matter have a localized region of influence generally restricted to areas in the immediate vicinity of the source of emissions. Secondary pollutants such as ozone and secondary particulate matter have a region of influence that includes the entire San Francisco Bay metropolitan region.

### *Criteria Pollutants*

Both the State of California and the federal government have established ambient air quality standards for several different pollutants. Pollutants covered by federal or state ambient air quality standards are often referred to as criteria pollutants.

Ozone, carbon monoxide, and particulate matter are the major pollutants of concern in the Bay Area, with sulfur dioxide being of concern in areas near major refineries. Ozone is a secondary pollutant that is characterized by regional occurrence episodes. Pollutant transport patterns within the Bay Area influence the frequency and magnitude of ozone episodes affecting particular communities. Carbon monoxide is a primary pollutant characterized by rather localized episodes affecting limited areas. Suspended particulate matter is a mixture of primary and secondary pollutants, and thus tends to have a rather indistinct pattern of regional and localized episodes.

### *Existing Air Quality Conditions*

The most frequent episodes of relatively high ozone concentrations in the Bay Area do not occur near the VAMC site, but rather in the Livermore Valley, South Bay, and Santa Clara Valley. Carbon monoxide concentrations tend to be highest in heavily urbanized areas, particularly in areas with heavy surface street traffic and major parking facilities such as multi-story garages.

The Clean Air Act imposes deadlines for achieving the federal ambient air quality standards. These deadlines vary according to the severity of existing air quality problems. The San Francisco Bay Area was recently reclassified from a moderate nonattainment area to a maintenance area for the federal ozone standard. The urbanized portions of the San Francisco Bay Area are presently categorized as moderate nonattainment areas for the federal carbon monoxide standards. The Bay Area is currently not classified for the federal inhalable particulate matter standard.

The Bay Area Air Quality Management District (BAAQMD) believes that the San Francisco Bay Area has also achieved the federal carbon monoxide and inhalable particulate matter standards, and has requested redesignation to an attainment status for these pollutants. Final action on the carbon monoxide redesignation request is not expected until early 1996. A formal designation of the San Francisco Bay Area as being in attainment of the federal inhalable particulate matter standard also is expected to occur within the next year.

### *Regulatory Considerations*

Air pollution control programs were established in California prior to the enactment of federal requirements. Responsibility for air quality management programs in California is divided between the Air Resources Board (ARB) as the primary state air quality management agency and air pollution control districts as the primary local air

quality management agencies. The Bay Area management agency is the BAAQMD. Federal Clean Air Act legislation in the 1970s resulted in a gradual merger of local and federal air quality programs, particularly industrial source air quality permit programs.

The BAAQMD has the primary air quality permit authority throughout the San Francisco Bay Area. Permit authority is derived from a combination of state and federal legislation, and can be categorized into construction or installation authorizations for individual pieces of equipment and permits for continued operation of equipment and facilities.

#### Federal Clean Air Act Conformity Process

Section 176(c) of the Clean Air Act requires federal agencies to ensure that their actions are consistent with the Clean Air Act and with federally enforceable air quality management plans. EPA has promulgated separate rules that establish conformity analysis procedures for transportation-related actions and for other (general) federal agency actions. The conformity review process is intended to ensure that federal agency actions:

- Will not cause or contribute to new violations of any federal ambient air quality standards,
- Will not increase the frequency or severity of any existing violations of federal ambient air quality standards, and
- Will not delay the timely attainment of federal ambient air quality standards.

A formal conformity determination is required for federal actions occurring in nonattainment or maintenance areas when the total direct and indirect emissions of nonattainment pollutants (or their precursors) exceed specified thresholds. The federal nonattainment and maintenance pollutants subject to conformity analyses in the San Francisco Bay area include ozone precursors (reactive organic compounds and nitrogen oxides) and carbon monoxide. Applicable threshold levels for federal action in the San Francisco Bay Area are 100 tons per year of carbon monoxide.

#### Air Quality Planning in the Bay Area

The Environmental Protection Element of the San Francisco Master Plan includes air quality objectives and policies. Objective 4 of the Environmental Protection Element is to assure that the ambient air of San Francisco and the Bay region is clean, provides maximum visibility, and meets air quality standards. Associated air quality policies include the following:



- Support and comply with objectives, policies, and air quality standards of the Bay Area Air Quality Management District.
- Encourage the development and use of urban mass transportation systems in accordance with the objectives and policies of the Transportation Element.
- Encourage greater use of mass transit in the downtown area and restrict the use of motor vehicles where such use would impair air quality.
- Promote the development of nonpolluting industry and insist on compliance of existing industry with established industrial emission control regulations.
- Exert leadership in the voluntary reduction of pollution emissions during air pollution alerts.

### *Climatology*

The San Francisco Bay Area experiences a Mediterranean type climate characterized by mild temperature conditions. Daily temperature variations are typically 43-59 degrees F during the winter and 53-71 degrees F during the summer. Annual precipitation, in the vicinity of the site, averages about 15 inches per year, with most precipitation occurring from November through April. Heavy fog is most likely to occur during late fall and winter.

Prevailing winds are from the west or northwest in all months, but the strongest winds are sometimes from the south. Mean wind speeds average 7-10 mph during the winter and 12-14 mph during the summer. Wind speeds typically exceed 20 mph 4-10 percent of the time during winter months and 18-27 percent of the time during summer months. Wind speeds above 35 mph can occur during any month.

### 3.11 Noise

Sound travels through the air as waves of minute air pressure fluctuations caused by some type of vibration and decreases in loudness at greater distances from the noise source. Sound level meters measure the actual air pressure fluctuations caused by sound waves, with separate measurements made for different sound frequency ranges. These measurements are reported using a decibel (dB) scale. Decibel scales are a logarithmic index based on a ratio of the actual pressure fluctuations generated by sound waves compared to a standard reference pressure value.

Most sounds consist of a broad range of sound frequencies. Because the human ear is not equally sensitive to all frequencies, a large number of frequency weighting schemes have been used to develop composite decibel scales that approximate the way the human ear responds to noise levels. The "A-weighted" decibel scale (dBA) is the most widely used for this purpose. The A-weighted scale significantly reduces the

measured pressure level for low frequency sounds while slightly increasing the measured pressure level for some high frequency sounds.

Varying noise levels are often described in terms of the equivalent constant decibel level. Equivalent noise levels (Leq) are used to develop single-value descriptions of average noise exposure over various periods of time. Such average noise exposure ratings often include additional weighting factors for potential annoyance due to time of day or other considerations. The Leq data used for these average noise exposure descriptors are generally based on A-weighted sound level measurements.

Average noise exposure over a 24-hour period is often presented as a day-night average sound level (Ldn) or a community noise equivalent level (CNEL). Ldn values are calculated from hourly Leq values, with the Leq values for the nighttime period (10 p.m. - 7 a.m.) increased by 10 dB to reflect the greater disturbance potential from nighttime noises. CNEL values are very similar to Ldn values, but include a 5 dB annoyance adjustment for evening (7 p.m. - 10 p.m.) Leq values in addition to the 10 dB adjustment for nighttime Leq values.

#### *Existing Noise Conditions*

Background noise levels at the VAMC are dominated by transportation sources, including private vehicles and public buses. The Environmental Protection Element of the San Francisco Master Plan indicates that background Ldn levels at the VAMC are about 55 dB. Adjacent residential areas have somewhat higher background noise levels, with average Ldn levels of about 60 dB. Clement Street has a background Ldn level of about 65 dB.

#### *Regulatory Considerations*

##### Federal Agency Guidelines

The federal Noise Control Act of 1972 (Public Law 92-574) established a requirement that all federal agencies must comply with applicable federal, state, interstate, and local noise control regulations. Federal agencies also were directed to administer their programs in a manner that promotes an environment free from noise that jeopardized public health or welfare.

##### State Agency Guidelines

The California Department of Health Services (1987) has published guidelines for the noise element of local general plans. These guidelines include a noise level/land use compatibility chart that categorizes various outdoor Ldn ranges into as many as four compatibility categories (normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable), depending on land use.

The state noise element guidelines chart identifies normally acceptable noise levels for low density residential uses as Ldn values below 60 dB. The normally acceptable range for high density residential uses is identified as Ldn values below 65 dB. For educational and medical facilities, Ldn values of 60-70 dB are identified as conditionally acceptable. For office and commercial land uses, Ldn values of 67.5-77.5 are categorized as conditionally acceptable.

*Noise Element of the San Francisco Master Plan*

Cities and counties in California are required to adopt a noise element as part of their general plan. The noise element for the San Francisco Master Plan is contained in the Environmental Protection Element. The noise element includes a land use compatibility chart. Guidelines from this chart for land uses around the VAMC site are included in Table 2.

*San Francisco Noise Ordinance*

In addition to the San Francisco Master Plan noise element, the City has adopted a noise ordinance (Article 29 of the Police Code) to regulate noise from fixed sources, portable equipment, garbage collection equipment, construction activities, motor vehicle operation when not on a public street or highway, and other sources of unnecessary, excessive, or offensive noise. The noise ordinance contains general nuisance abatement provisions plus specific noise limitations that vary by zoning district, time of day, and type of noise source. The general noise limitations specified in the noise ordinance are summarized in Table 3. The noise ordinance contains exemptions for emergency work, emergency and safety signaling devices, and various types of impact tools, pavement breakers, and jackhammers. In addition, the ordinance provides for a variance process and a permit process for nighttime construction work.

### 3.12 Hazardous Material and Waste

*Phase 1 Environmental Site Assessment*





Tetra Tech prepared a Phase 1 Environmental Site Assessment (ESA) of the proposed project site. The purpose of this study was to determine the potential for soil or ground water contamination on the site. The ESA consisted of research of regulatory agency files, historical research, and a site inspection to assess the likelihood of existing or historical hazardous material use and waste release on the project site. The ESA concluded that, because no recognized indicators of environmental contamination were present on the site, no further environmental investigation is warranted. The following summarizes the conclusions of the Phase I Site Assessment. The full study is available for review at the VAMC.



Table 2  
Land Use Compatibility Chart For Community Noise

LAND USE CATEGORY	Sound Levels and Land Use Consequences (see explanation below)						
	L <sub>dn</sub> Value in Decibels						
	55	60	65	70	75	80	85
RESIDENTIAL All Dwellings, Group Quarters							
SCHOOL CLASSROOMS, LIBRARIES, CHURCHES, HOSPITALS, NURSING HOMES, ETC.							
PLAYGROUNDS, PARKS							
GOLF COURSES, RIDING STABLES, WATER-BASED RECREATION AREAS, CEMETERIES							

Source: City and County of San Francisco Master Plan

	Satisfactory, with no special noise insulation requirements.
	New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the region.
	New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
	New construction or development should generally not be undertaken.

**Table 3**  
**Summary of Noise Limits Established in the San Francisco Noise Ordinance**

Noise Source	Applicable Zoning District	Time Period	Noise Limits
Construction Equipment, Except Impact Tools	All Zoning Districts	Any time	80 dBA at 100 feet
Solid Waste Collection Equipment	All Zoning Districts	Any time	75 dBA at 50 feet
Off-Highway Vehicle Use Off-Highway Vehicles Heavy Duty Vehicles Motorcycles Other Highway Vehicles	Public Zones	Any time	70 dBA at 50 feet 82 dBA at 50 feet 77 dBA at 50 feet 74 dBA at 50 feet
Fixed Noise Sources	Low and Medium Density Residential Zones	7 am - 10 pm 10 pm - 7 am	55 dBA at property line 50 dBA at property line
	High Density Residential, Neighborhood Commercial, and Residential Commercial Zones	7 am - 10 pm 10 pm - 7 am	60 dBA at property line 50 dBA at property line
	Commercial Zones	7 am - 10 pm 10 pm - 7 am	70 dBA at property line 60 dBA at property line
	Light Industrial Zones	Any time	70 dBA at property line
	Heavy Industrial Zones	Any time	75 dBA at property line
Engine-Powered Model Vehicle Use	Low and Medium Density Residential Zones	7 am - 10 pm 10 pm - 7 am	55 dBA at 50 feet 50 dBA at 50 feet
	High Density Residential, Neighborhood Commercial, and Residential Commercial Zones	7 am - 10 pm 10 pm - 7 am	60 dBA at 50 feet 50 dBA at 50 feet
	Commercial Zones	7 am - 10 pm 10 pm - 7 am	70 dBA at 50 feet 60 dBA at 50 feet
	Light Industrial Zones	Any time	70 dBA at 50 feet
	Heavy Industrial Zones	Any time	75 dBA at 50 feet
	Public Zones	Any time	80 dBA at 50 feet

Note: The noise ordinance provides for certain exceptions and variances from these limits.  
Source: San Francisco Police Code, Article 29.

### 3.13 Hazardous Material and Waste

#### *Phase 1 Environmental Site Assessment*

Tetra Tech prepared a Phase 1 Environmental Site Assessment of the proposed project site. The purpose of this study was to determine the potential for soil or ground water contamination on the site. The site assessment consisted of research of regulatory agency files, historical research, and a site inspection to assess the likelihood of existing or historical hazardous material use and waste release on the project site. The site assessment concluded that, because no recognized indicators of environmental contamination were present on the site, no further environmental investigation is warranted. The following summarizes the conclusions of the Phase I Site Assessment. The full study is available for review at the VAMC.

#### *Hazardous Materials and Wastes*

The VAMC stores and uses a variety of materials classified as hazardous by federal and state law. The ESA included research at the City and County of San Francisco Department of Public Health, Hazardous Materials Division (HMD), and Local Oversight Program (LOP). Research at the HMD revealed no evidence of hazardous material reporting, storage, or release violations at the VAMC. Research at the LOP revealed that certain areas of the VAMC (not on the project site) had previously been subject to minor soil contamination discovered during underground fuel tank excavations and that the contamination had been sufficiently remediated. This incident would not have affected the proposed project site.

The proposed project site is used primarily for open space with no structural improvements currently on the site. Limited utility improvements and a concrete walk are the only man-made features present on the site. The ESA found no evidence of existing or past hazardous material or waste use/storage on the property. The site had been a part of a cemetery until the early 1900's when it was converted to use in conjunction with Fort Miley Military Reservation. Historical research revealed no past structural improvements or uses of the subject property involving hazardous materials or wastes. The ESA revealed no evidence of regulatory-agency-listed sites which would pose a risk of contamination to the project site.

#### *Solid Waste*

Non-hazardous solid waste and recycling services at the VAMC are provided by Sunset Scavenger Company. No solid wastes are presently generated at the project site.



*Medical and Infectious Wastes*

Medical and infectious wastes at the VAMC are handled by IES, Incorporated of Oakland, California, a registered and certified medical waste hauler. No medical wastes are generated at the project site. Any medical or infectious wastes generated at the existing SAT Clinic (Building 9) and PTSD operations, (Building 8) would be handled by IES, Incorporated.



## 4. ENVIRONMENTAL CONSEQUENCES

### 4.1 Land Use and Planning

#### *Preferred Alternative*

##### Land Use

The overall land use effect of the proposed Neurosciences Building would be to slightly increase the development density of the institutional uses on the VAMC campus site. The proposed building would occupy a portion of one of the few landscaped areas at the campus, and would represent a conversion of that land from open space to developed institutional use. The addition of the 14,700 square foot proposed project to the overall one million square foot VAMC facility would represent a 1.4% increase in total developed space at the facility. The proposed land use would be the same as uses already occurring on the facility less than 200 yards from the proposed Neurosciences Building site. Although the proposed building would bring patients slightly closer to the adjacent neighborhood, it would be oriented and operated so as to minimize the orientation of patients towards the surrounding community. In addition, as described in Section 4.4, the proposed building would not increase parking demand. Therefore, it would not have a significant effect on existing land uses either on the campus or in the adjacent community.

##### Planning

The VAMC has provided copies of the project plans to the City for its review, and has solicited and considered city input on those plans in compliance with PL 100-678. The VAMC has not applied for a Conditional Use Permit or prepared a Facility Master Plan for the City and County of San Francisco because the VA has determined that, as a federal facility, development at the VAMC does not fall under the regulatory purview of the City.

The VAMC has received a Negative Determination from the California Coastal Commission (CCC) for the facility on December 2, 1994. The CCC, through this Determination, has concurred with the VAMC that the facility would not affect coastal recreation or any other coastal resources and, therefore, would be consistent with CZMA requirements.



*Reduced Project Alternative*

Impact of this alternative would be similar to those described for the Preferred Alternative, above. However, this alternative would remove about 1,500 square feet less of the landscaped area than would the Preferred Alternative. As with the Preferred Alternative, this alternative would not have a significant adverse effect on land use or planning.

*No Project Alternative*

Under this alternative there would be no land use modifications of the site. No building would occur and the site would remain landscaped open space. As with the Preferred Alternative, this alternative would comply with applicable CZMA requirements.

**4.2 Population and Socioeconomics***Preferred Alternative*

There would be no population impacts from development of the proposed Neurosciences Building. The VAMC work force after the project would be the same as the work force before the project. The staff for the new building are already working on site in Buildings 8 and 9. The patient/client population of the new building also are already being served at the VAMC. A short-term economic benefit will accrue to the community from the creation of jobs during the construction of the Neurosciences Building. Otherwise, the project would not result in adverse socioeconomic impacts or long-term economic benefits. No permanent jobs would be lost or created, and the patient load would not be affected by the building.

*Reduced Project Alternative*

Under this alternative, construction employment would be slightly reduced compared with the Preferred Alternative. Other impacts would be as described for that alternative.

*No Project Alternative*

This alternative would not provide the short-term economic benefits of the project. It would not affect population or other socioeconomic factors.

### 4.3 Visual and Aesthetic Resources

#### *Preferred Alternative*

##### *Relationship to Existing Site*

The proposed Neurosciences Building would be smaller in scale and height than the adjacent VAMC structures, and would fall within the broad range of architectural styles present on the campus. The overall visual effect of the building would be to alter the character of the western portion of the overall site area from that of landscaped lawn and trees to that of a small-scale institutional building. In addition, it would incrementally decrease the already minimal undeveloped open space on the campus' south side, and detract slightly from the visual quality of the facility's entry area. Due to the screening afforded by existing vegetation, the low-rise design, and the location of the structure in the westernmost corner of the landscaped area, these impacts would be minimized and would not be significant.

The proposed building would be visible in on-site views from Fort Miley Circle, existing Buildings 1 and 203, and various parking lots. Ground-level views from these areas would be of a small modern office/institutional structure. Views from the north would be of a one-story building in the foreground with trees in the background, while views from the east and west would be of a split-level structure backed by trees and existing buildings, respectively. The existing lawn area would dominate the foreground in views of the site from Fort Miley Circle and adjacent sidewalks east of the site. Views of the Neurosciences Building from the upper stories of the southern end of Building 1 and the eastern end of Building 203 would be primarily of its roof and mechanical structure.

##### *Relationship to Neighborhood*

The proposed building would be visible in off-site views from Clement Street between about 42nd and 44th Avenues, as well as in views northward from 43rd Avenue. These views would be filtered through the existing trees that line the site's Clement Street frontage. The building would appear through gaps in the vegetation as a relatively small scale, low-rise office/institutional structure. The building's primary access points would be on the north and west. The project's primary change in views from the south would be the incremental reduction of undeveloped landscaped open space along the VAMC's Clement Street frontage and corresponding increase in apparent development density of the overall complex.

This increase in development density would be perceived primarily by residents directly facing the facility, and by motorists and pedestrians on the two-block segment of Clement Street between 42nd and 44th Avenues. This increase in density would be most noticeable in the first few months after construction, and the project

would gradually become less noticeable as landscape vegetation matures and residents become more accustomed to the structure.

#### Recommendation

Although the Preferred Alternative would not have a significant adverse effect on aesthetics and visual quality, the following measure is recommended to further reduce its potential effects as viewed from Clement Street:

- Develop a detailed landscape plan for the project. That plan should include a tree planting plan for the entire Clement Street and lower Fort Miley Circle frontage of the project site to visually screen the proposed building from views from Clement Street and adjacent residential areas. The trees should be of species visually compatible with the existing mature pines.

#### *Reduced Project Alternative*

This alternative would have visual affects similar to those of the Preferred Alternative except that the building would not extend as far eastward as the Preferred Alternative. This would reduce the building's mass and visual prominence when viewed from the south. The recommendation for the Preferred Alternative, above, also would apply to this alternative.

#### *No Action Alternative*

Under this alternative there would be no visual modifications of the site. No building would occur and all vegetation on the site would remain. Views of the site from on-site and off-site would not be altered.

### 4.4 Transportation and Parking

#### *Preferred Alternative*

The proposed Neurosciences Building would be a relocation of existing uses on the VAMC complex. It would not generate any additional patient, staff, or visitor travel to or from the complex. In addition, it would not result in the removal of any existing parking spaces. Conversion of Building 9 to a residential duplex would include parking spaces for that use. Decompression of staff at Building 8 would not generate additional parking needs. Specific transportation and parking impacts of the proposed facility are discussed below.

#### Site Access and Traffic

The Preferred Alternative would not alter existing access to the VAMC complex. Because it would be a relocation of uses already occurring at the VAMC and would



not alter parking layout at the facility, the Preferred Alternative would not alter traffic conditions or flows either on the VAMC or on city streets accessing the VAMC. Temporary increases to truck traffic during construction would occur particularly during the removal of the excavated material from the site. Trucks would access the site from Clement Street arriving via major streets such as Geary Boulevard and Highway 1.

##### Parking

The proposed Neurosciences Building would be built on an existing open space area and would not alter the parking supply on the VAMC or in the surrounding neighborhood. Because it would not increase or alter any existing use of the VAMC, the Preferred Alternative would not generate additional parking demand on the VAMC site or in the surrounding neighborhood. The existing on-site parking deficit of 498 spaces would continue to exist with implementation of the Preferred Alternative, and would be expected to remain until construction of a new parking structure. Such construction is proposed after the year 2000. Until that time, the VAMC will continue to contribute to the limited parking availability in the surrounding neighborhood. This would occur with or without development of the Neurosciences Building.

##### Transit

Because the proposed building would not alter the number of people accessing the site, it would not affect transit conditions on any of the lines to the VAMC or in its vicinity.

##### *Reduced Project Alternative*

Under this alternative a reduced-scale Neurosciences Building would be developed on the site. As with the Preferred Alternative, this alternative would not alter the existing access, transportation system, transit, or parking supply or demand at the VAMC. Temporary increases to truck traffic during construction would occur particularly during the removal of the excavated material from the site, although less material would be removed and therefore fewer trucks would be traveling to and from the site. The existing on-site parking supply deficit would continue to exist, as would the limited parking availability in the surrounding neighborhood.

##### *No Action Alternative*

Under this alternative there would be no development of the Neurosciences Building or relocation of those uses. As with the proposed action, this alternative would not alter the existing access, transportation system, transit, or parking supply or demand at the VAMC. The existing on-site parking supply deficit would continue to exist, as would the limited parking situation in the surrounding neighborhood.

## 4.5 Cultural Resources

### *Preferred Alternative*

Impacts to cultural resources as a result of the proposed construction of the Neurosciences Building would include ground disturbance to buried archaeological sites and visual intrusion to a National Register District. However, it has already been determined that the setting of the district has been destroyed by Buildings 200 and 203 which were constructed in 1965 and 1976 respectively. These “overpowering intrusions...totally violated the (original) intent of the siting...which was to provide a semi-ceremonial entrance courtyard with drive and fountain, bordered by Buildings 1 and 12 and a sweeping front lawn to the street” (Stone Marraccini Patterson 1990). Therefore, the only potential effects from the construction of the proposed Neurosciences Building would be to the architectural integrity of the contributing structures of the District, particularly Building 1 which is the closest in proximity to the proposed project location and is the only “outstanding example of the stylistic period (of the National Register District)...constructed during the original development period” (Stone Marraccini Patterson 1990). Impacts to Building 1 and any other component of the Fort Miley National Register District from the construction of the proposed Neurosciences Building could be easily avoided by restricting all construction activities to the southern side of Fort Miley Circle and by controlling or eliminating the amount of dust created during construction activities. Adherence to these stipulations would result in no adverse effects to the National Register District.

The potential for buried prehistoric or historic deposits in the proposed project location is relatively low. However, if intact resources are present, there could be an effect upon them by ground disturbance associated with the construction of the proposed Neurosciences building. The presence of an archaeological monitor is recommended during all ground distributing activities. If intact prehistoric or historic resources are encountered and determined to be eligible, impacts to these resources from construction may be considered adverse.

### *Reduced Project Alternative*

Impacts to cultural resources under this alternative would be similar to those described above for the Preferred Alternative. However, the shortened eastward extension of the building would slightly lessen the required ground disturbance and, therefore, the potential for affecting unknown subsurface deposits would be slightly reduced.

*No Action Alternative*

There would be no impacts to cultural resources under this alternative.

**4.6 Geology and Soils***Preferred Alternative*Seismicity

Seismic shaking due to a large earthquake on the nearby San Andreas or San Gregorio faults could cause damage to the proposed building or associated utilities. Engineering measures cannot fully mitigate against all potential earthquakes. However, buildings would be constructed to minimize seismic hazards. The project is within Seismic Zone 4 of the Uniform Building Code and would be constructed to meet requirements of this zone. The proposed project would be constructed in accordance with all federal, state and local seismic safety standards.

Soils

Earthmoving activities associated with new construction could result in less than significant impacts to soils due to soil erosion when uncovered soils are exposed to rainfall and runoff. Soil erosion can also impact waterways (see impacts to surface water quality, Section 4.7). Mitigation would include preparation of an erosion control plan consistent with the Storm Water Pollution Prevention Plan. Site excavation and grading would be performed using methods designed to minimize runoff and control on-site drainage. Erosion control measures would be implemented.

Slope Stability

Slope failure would not likely occur on the project site. Recommendations of the geotechnical consulting engineer (Nolte and Associates, 1994) would be implemented to minimize the potential for impacts due to slope failure. A geotechnical engineer would review design plans and details and other improvement plans to determine whether they are compatible with the geotechnical conditions of the site. A geotechnical engineer and engineering geologist would inspect the site grading and document placement of engineered fills, stability of cut and fill slopes, and placement of subdrains.



*Reduced Project Alternative*Seismicity

Impacts related to seismicity, soils and slope stability under the Reduced Alternative would be the same as those listed under the Preferred Alternative.

*No Action Alternative*Seismicity

No direct impacts to the site would occur under the no action alternative. However, to the extent that existing buildings housing the functions that would be moved to the proposed structure are not as well designed to resist seismic hazards as the proposed structure, indirect impacts of continuing to use the existing buildings may occur. Mitigation measures would include evaluation of the potential seismic hazards of the existing buildings, and implementation of appropriate action to reduce any risks identified in the evaluation.

Soils and Slope Stability

No impacts are expected under the No Action Alternative.

#### 4.7 Hydrology and Water Quality

*Preferred Alternative*

During construction, excavation and site preparation activities would result in potential exposure of surface soils to storm water runoff. Because of the small surface area of the site and because the upstream boundary of the site is a paved street that conducts storm water around the site, storm water runoff would not likely cause significant impacts. Since construction could occur during the rainy season, between November and April, an erosion prevention plan would be prepared and implemented to limit the potential for erosion and for sediment-laden runoff to flow off site into the storm sewer.

After project completion, about one-third of the area of the site would be covered by new impervious surfaces, including roofs and pavement. This result in some additional runoff during large storms since percolation of the water would be prevented on the impervious surfaces. Most of the storm water would be directed to the storm sewer. This would not result in a significant impact.

*Reduced Project Alternative*

Impacts under this Alternative would be the same as those described under the Preferred Alternative.

*No Action Alternative*

No impacts would be expected to result from the No Action Alternative since no new construction would occur.

**4.8 Biological Resources***Preferred Alternative*

Because no sensitive plant or animal species have been identified in the project area there would be no impacts to sensitive species from implementation of the Preferred Alternative. Sensitive bird species utilize native habitat areas that are available nearby at Lincoln Park but not at the VAMC. No wetlands or other sensitive habitats are found at the hospital, and nearby wetlands and sensitive habitats at Lincoln Park would not be adversely affected by the project.

*Reduced Project Alternative*

This alternative would have impacts less than but similar to those described for the Preferred Alternative.

*No Action Alternative*

The No Action Alternative would not affect biological resources.

**4.9 Public Services and Utilities***Preferred Alternative**Public Services*

*Security.* The proposed building would not result in additional staff or patients at the VAMC and would not thereby increase demands on VAMC security. The only public entrances to the proposed Neurosciences Building would be via the upper level on campus road, Fort Miley Circle, between the new building and adjacent Building 203 and along Fort Miley Circle access road. Both entrances would be monitored and controlled including perimeter camera surveillance and internal security alarms. The proposed building's security office would be located on the first level, and would have direct control of the SAT portion of the building. Lower level exits would be

alarmed and for emergency use only. The headquarters security office for the VAMC in nearby Building 200 would be only about 100 feet from the new building.

*Fire Protection.* The new building would be built to current code for fire protection and suppression. The fire department connection would be made in the landscaped area on the northwest side of the proposed building. An existing fire main and gate valve is about 150 feet from the southeast side of the proposed building. Implementation of the Preferred Alternative would have the effect of reducing the risk to patients and staff from the danger of fire because it would provide quarters which have state-of-the-art fire retardant building materials and suppression equipment.

#### Utilities

*Water Supply.* The Preferred Alternative would not result in additional personnel or patient loads on site, but rather relocate their activities and services from their present location to this new structure. An eight-inch water line runs north to south on the west side of the proposed building site, and a four-inch line crosses Ft. Miley Circle just to the north of the site. The water supply connection would be made in the landscaped area on the northwest side of the proposed building. There is no reason to conclude that there would be increased water demands over existing conditions, and therefore no impacts to water supply are identified. With the same water source and no increase demand, no impacts to the water supply would be expected.

*Water Quality.* The quality of the existing water supply to the VAMC is good, and the Preferred Alternative would not increase volume demand or involve other action that should affect water quality. No significant impact to water quality would therefore be expected to occur.

*Sanitary Sewer System and System Maintenance.* The proposed building location is immediately east of a 12-inch line of the VAMC's sanitary sewer system, so that the new hook-up would require little or no trenching and would be connected in the landscaped area northwest of the new structure. The hook-up and servicing of the new building would not add to the overall volume of wastewater to the facility or to the city system. System maintenance would also be unaffected in any significant way, although less intensive use of Buildings 8 and 9 would reduce potential system stress on the smaller sized piping system in the northeast sector of the facility's sewer system. No significant impact would occur under this Alternative to either the VAMC's sanitary sewer system or its maintenance.

*Storm Water System.* The new building would increase impervious surfaces, thereby increasing the amount of storm water runoff and decreasing the area available for soil absorption and percolation of rainfall. Runoff from the roof of the building would be conveyed directly into the storm drain system. Aside from site drainage that might be contributing to the slide area on the north part of the site, the storm drain



system is in very good condition and adequately serves the site. The Preferred Alternative would not add to the amount of water draining to the slide area. The added runoff from this alternative should have no significant impact on the capacity or performance of the VAMC's storm water collection and conveyance system.

*Electrical Supply, Natural Gas, and Telephone Service.* These services are supplied by private enterprise, electricity and gas by the Pacific Gas and Electric Company and telephone by Pacific Bell. The levels of service anticipated to be needed by the staff and patient activity at the new building would not be appreciably more than that presently needed in Buildings 8 and 9. These companies have the capability to provide the needed new connections without impact to existing customers, therefore no significant impacts to these services would occur.

#### *Reduced Project Alternative*

##### Public Services

*Security.* Under this alternative, security would be same as described above for the Preferred Alternative. As with that alternative, no significant impacts would occur.

*Fire Protection.* As with the Preferred Alternative, the smaller building would be built to current code for fire protection and suppression, and therefore would tend to reduce rather than increase any risk to patients and staff from fire dangers while on site. An existing fire main and gate valve is about 200 feet from the southeast side of the reduced size building.

##### Utilities

*Water Supply.* Although the building would be smaller than under the Preferred Alternative, with staffing and patient levels remaining constant, water use would be use same as under that alternative and as under current conditions for this activity at the VAMC. As with the Preferred Alternative, the smaller building would have convenient access to existing water supply lines.

*Water Quality.* Same as under the Preferred Alternative.

*Sanitary Sewer System and System Maintenance.* Same as under the Preferred Alternative.

*Storm Water System.* Same as under the Preferred Alternative, although the added impervious surface would be reduced from that of the Preferred Alternative by about 15 percent. No significant impact would occur under this alternative.

*Electrical Supply, Natural Gas, and Telephone Service.* Same as under the Preferred Alternative.

*No Action Alternative**Public Services*

*Security.* Under this alternative, the Neurosciences Building would not be constructed, therefore the treatment of patients would remain at Buildings 8 and 9 where security and the ability to control access is problematic.

*Fire Protection.* Staff and patients using Buildings 8 and 9 would continue to be exposed to the present level of fire risk, which is greater than the risk they would be exposed to in the proposed new building under either the Preferred Alternative or Reduced Project Alternative.

*Utilities*

*Water Supply.* Water demand for the services affected by the proposed Neurosciences Building would remain the same as is the current case.

*Water Quality.* Water quality would not be affected since no new construction or demand for services would occur.

*Sanitary Sewer System and System Maintenance.* The sanitary sewer system would be unchanged from its present configuration and condition, and sewer maintenance would be unaffected under this alternative.

*Storm Water System.* The present design and operation of the storm water collection and conveyance system would be unchanged.

*Electrical Supply, Natural Gas, and Telephone Service.* Services would remain as at present with no generation of additional demand and therefore no impact to these services.

#### 4.10 Air Quality and Climatology

Clean Air Act conformity requirements provide the major criteria for assessing the significance of air quality impacts from the proposed action and its alternatives. Because the proposed action would not alter existing patient or staffing levels, the major source of air quality impacts would be associated with construction of a new Neurosciences building. Significant air quality impacts would occur if the net increase in emissions associated with the proposed action would exceed 100 tons per year of carbon monoxide or ozone precursors (organic compounds or nitrogen oxides).

*Preferred Alternative*

Emissions associated with facility construction would include fugitive dust from site disturbance and vehicle exhaust from construction equipment operation. Emission estimates for facility construction have been prepared using standard procedures and assumptions (U.S. EPA 1985). Emission estimates are summarized in Table 4 below. Because emission estimates are substantially below the conformity determination requirement thresholds, air quality impacts from construction activities are not considered significant.

**TABLE 4**  
**CONSTRUCTION PERIOD EMISSIONS SUMMARY**

Construction Phase	Construction Period Emissions (tons)				
	ROG	NOx	CO	SOx	PM10
Site Preparation Emissions	0.1	1.2	0.6	0.1	0.4
Facility Construction Emissions	0.2	3.8	1.9	0.4	0.6
Total Construction Period Emissions	0.3	4.9	2.5	0.5	0.9
Nominal Site and Foundation Preparation Period:	25 days				
Nominal Facility Construction Period:	60 days				
Nominal Acre-Days for Site and Foundation Preparation:	25 acre-days				
Nominal Acre-Days for Facility Construction:	30 acre-days				
Equipment Use for Site and Foundation Preparation:	950 vehicle-hours				
Equipment Use for Facility Construction:	2,640 vehicle-hours				
Normalized Equipment Use, Site & Foundation Preparation	38.00 hours/acre-day				
Normalized Equipment Use, Facility Construction:	88.00 hours/acre-day				

Notes: ROG = reactive organic compounds  
 NOx = oxides of nitrogen  
 CO = carbon monoxide  
 PM10 = inhalable particulate matter  
 SOx = sulfur oxides

The PM10 fraction of fugitive dust is based on typical silt plus clay content of clay loam soil types (40%). Areas subject to surface disturbance include the entire construction site during site and foundation preparation; facility footprints and areas paved early in the construction process are excluded from the disturbed area during actual facility construction.

Construction vehicle numbers are estimated from construction site sizes and the nature of the construction project.

Dust control program effectiveness assumes implementation of standard fugitive dust control practices (50%).

Data Source: Emission rate data and procedures from U.S. Environmental Protection Agency 1985 (AP-42, Volume I [section 11.2.4] and Volume II [section II-7])  
 Diesel vehicle exhaust TOG emission rates converted to ROG emission rates using 97.58% factor obtained from California Air Resources Board.



*Reduced Project Alternative*

Construction emissions associated with this alternative would be essentially the same as those for the Preferred Alternative. Air quality impacts for this alternative would not be significant.

*No Action Alternative*

There would be no air quality impacts from the No Action Alternative.

#### 4.11 Noise

Land use compatibility standards from the San Francisco Master Plan provide the major criteria for assessing the significance of noise impacts from the proposed action and its alternatives. The San Francisco Noise Ordinance provides some additional criteria that are relevant to construction activities and fixed equipment noise levels. CNEL levels below 65 dB are generally acceptable for medical facility uses. CNEL levels below 60 dB are desirable for residential areas. The San Francisco Noise Ordinance allows construction activities to produce temporary increases in noise levels above the general land use compatibility guidelines.

*Preferred Alternative*

The proposed action would not alter existing patient or staff levels at the VAMC, and thus would not cause any significant change in traffic generation or resulting traffic noise levels. The major noise impacts associated with a new Neurosciences Building would result from facility construction activities.

Estimates of typical construction vicinity noise levels are provided in Table 5, assuming that a bulldozer, two front-end loaders, and a truck are operating near each other. Noise levels during the construction period would exceed a CNEL of 65 dB within about 400 feet of the construction site, but would drop below 60 dB for locations more than 800 feet from the site. Because construction noise would affect only a limited area and would be temporary, noise impacts are not considered significant.

*Standard Operating Procedures.* Construction activities should be limited to normal daytime working hours to minimize unnecessary noise impacts.

TABLE 5  
TYPICAL CONSTRUCTION SITE NOISE IMPACTS

Receptor Distance (feet)	Noise Level Increment (dBA) per Unit			Combined Equipment Noise (dBA)	Work Day CNEL Increment (dB)
	Bulldozer	Loader	Truck		
50	85.0	80.0	85.0	89.2	85.4
100	78.9	73.9	79.0	83.1	79.3
200	72.7	67.8	72.9	77.0	73.2
400	66.2	61.5	66.7	70.6	66.8
600	62.2	57.7	63.0	66.8	63.0
800	59.3	54.9	60.3	64.0	60.2
1,000	56.9	52.6	58.1	61.8	58.0
1,500	52.2	48.3	54.1	57.5	53.7
2,000	48.6	45.1	51.2	54.3	50.5
2,500	45.5	42.4	48.7	51.6	47.8
3,000	42.8	40.1	46.7	49.3	45.5
4,000	38.0	36.0	43.2	45.5	41.7
5,280	32.7	31.7	39.6	41.4	37.6
7,500	24.6	25.3	34.4	35.7	31.9
9,000	19.6	21.4	31.3	32.4	28.6
10,560	14.6	17.6	28.4	29.2	25.4

Notes: Combined equipment noise level and Ldn increment calculations assume one bulldozer, two front end loaders, and one heavy truck operating concurrently in proximity to each other over a 10-hour work day.

Noise calculations include minimum atmospheric absorption rates of 0.229 dB/100 feet for bulldozers, 0.152 dB/100 feet for front end loaders, and 0.098 dB/100 feet for heavy trucks.

Atmospheric absorption calculated from source spectrum data for a range of temperature and humidity conditions; minimum absorption rates (cool temperatures and high humidity) used for noise calculations.

Except for sounds with highly distinctive tonal characteristics, noise from a particular source will not be identifiable when its incremental noise level contribution is significantly less than background noise levels.

Data Sources: U.S. Environmental Protection Agency, 1971.  
Gharabegian, et al., 1985.  
Acoustical Society of America, 1978.

### *Reduced Project Alternative*

Construction noise associated with this alternative would be essentially the same as identified for the Preferred Alternative. Noise impacts for this alternative would not be significant.

### *No Action Alternative*

There would be no noise impacts from the No Action Alternative.

#### 4.12 Hazardous Materials and Waste

##### *Preferred Alternative*

###### Hazardous Materials and Waste

The construction of the proposed building would involve demolition of the existing concrete walk and removal of three trees. Construction also would involve excavation of soils for site preparation and utility installation.

No adverse construction impacts related to solid and hazardous wastes would result from the Preferred Alternative because all demolition materials are non-hazardous and would be easily disposed of or recycled. The Preferred Alternatives would not cause any net increase in hazardous materials or wastes, because existing psychiatric operations would not be expanded. No adverse operational impacts related to hazardous materials and wastes would result from the Preferred Alternative, because the nature of waste streams would not substantially change from existing conditions. In addition, the types of uses proposed at the facility are typically office uses generating minimal hazardous materials and wastes.

###### Medical and Infectious Waste

No adverse operational impacts related to medical and infectious wastes would result from the Preferred Alternative because the nature of waste streams would not substantially change from existing conditions.

##### *Reduced Project Alternative*

Impacts to hazardous materials and waste and medical waste would be the same as described for the Preferred Alternative.

##### *No Action Alternative*

No impacts to solid and hazardous wastes would result from the no action alternative because the generation of solid or hazardous wastes at Buildings 8 and 9 would not be altered from existing conditions. No impacts to medical and infectious wastes would result from the No Action Alternative because the generation of medical and infectious wastes at the VAMC would not change.



## **5. OTHER CONSIDERATIONS REQUIRED BY NEPA**

### **5.1 Unavoidable Adverse Impacts**

Unavoidable adverse impacts are those impact that cannot be mitigated below the level of significance. No unavoidable adverse impacts from the proposed action were identified in this EA.

### **5.2 Relationship Between Short-Term Uses and Long-Term Productivity**

Short-term uses of the environment include construction activities and short-term land uses. The short-term uses (i.e., construction staging areas) associated with the proposed action would not impair long-term productivity of the VAMC facility. In the long-term, the proposed action would improve operations of the facility.

### **5.3 Irreversible or Irretrievable Commitment of Resources**

Irreversible and irretrievable resource commitments relate to the use of non-renewable resources and the effect on future generations from the use of these resources. Construction of the Neurosciences Building would result in a relatively small and productive use of non-renewable raw materials and energy. This would not result in a significant adverse impact.

### **5.4 Growth-Inducing Impacts**

Growth-inducing impacts are the population or economic growth resulting from a proposed action. The proposed action would result in minor temporary short-term economic benefits from construction, but because the project is designed for the current number of employees and patients, it would not result in the need for new staff or generate additional patient loads. Therefore, it would not induce any growth either on the VAMC campus or in the area.

### **5.5 Cumulative Impacts**

The VAMC developed a Facility Development Plan in 1995 that established goals and objectives for the facility and identified strategies for future development in response to those goals. Future priorities identified included the need for seismic corrections, provision of adequate space for ambulatory care needs, provision of adequate space for mental health care, consolidation of research and administration functions, and alleviating projected parking shortfalls. A five-year plan and beyond five-year plan were developed in the FDP to meet facility goals through a modest amount of new construction in combination with reuse and rehabilitation of existing structures. The FDP established framework for future development at the facility, however, will be affected by budget constraints and other factors (e.g., changing approaches to

providing needed services), which will influence the level of future development. In addition, a trend toward off-site clinics may further alter FDP projections.

The five-year plan includes seismic upgrades and renovation of existing buildings; construction of a new 50,000 square foot Mental Health and Administration Building (to replace space to be lost with the future demolition of Building 8); and demolition of Building 5. Beyond five years, the plan calls for demolition of Building 8 and construction of a parking lot on that site, and development of a parking structure on the surface parking lot north of the existing parking structure.

In addition to the development planned under the 1995 FDP, the VAMC has proposed a 1,200 square foot storage addition to the existing canteen area for construction in 1995. The California Coastal Commission has recently approved a coastal consistency determination for this project.

### *Cumulative Environmental Effects*

As noted above, full buildout of the 1995 FDP is not likely. In addition, detailed analysis of project and cumulative development may be required for various future projects envisioned in the FDP at the time that they are formally proposed. The following discussion summarizes the general cumulative impacts that would occur under full development of the FDP.

*Land Use and Planning.* Cumulative development indicated in the 1995 Facility Development Plan for the next five years would incrementally increase the development density on the VAMC campus. Beyond five years, development on the campus would continue to increase, however this would be offset by the removal of Building 8. Cumulative development would be required to obtain federal consistency determinations from the California Coastal Commission under the CZMA, and would need to comply with NHPA requirements.

*Population/Socioeconomics.* Should cumulative development expand services at the VAMC some increase in staffing and patient load could occur. Increases to staffing would however, not be consistent with current requirements to reduce staff and would require additional funding. Any environmental impacts resulting from increase services, e.g., parking demand would be offset by the expanded facilities.

*Visual and Aesthetic Resources.* Cumulative development on the campus would not substantially alter off-site views onto the facility. Internal views would be altered by the construction of new buildings, parking lots, and the proposed new parking structure. Overall, the facility would appear somewhat more densely developed than at present. Depending on architectural styles, the new buildings may or may not be visually compatible with existing structures.

*Transportation and Parking.* Parking demand is projected by the VAMC to increase from 1,722 spaces to 1,811 spaces by 2005. Projected parking deficits would thereby increase commensurately from the current 498 spaces to 587 spaces by the year 2005. Upon construction of the proposed new parking lot and structure, this deficit would be substantially reduced or eliminated.

*Cultural Resources:* Cumulative development on the campus could further alter features in the historic district although the setting of the district was already disturbed by Buildings 200 and 203. Impacts to contributing elements of the District could be adverse if additional projects are not designed to protect the architectural integrity of the buildings. Future development of the VAMC would be required to comply with NHPA and its implementing regulations which includes consultation with the SHPO and National Park Service to identify appropriate mitigation for any adverse effects on historic properties.

*Geology and Soils.* Cumulative development of the FDP would slightly increase excavation and soil removal from the site. Erosion hazards would be slightly increased. The proposed seismic improvements would substantially improve safety of the facility in the event of a major earthquake.

*Hydrology and Water Quality.* Cumulative development under the proposed FDP would not substantially alter site surface or ground water quantities or quality. Construction impacts on erosion and water quality could be minimized through implementation of standard stormwater pollution prevention measures.

*Biological Resources.* Buildout of cumulative development planned for the facility would not affect any sensitive biological resources.

*Public Services and Utilities.* Cumulative development such as police and fire could increase demand for public surveys and utilities. This demand could be mitigated by increasing police and fire staffing if necessary and upgrading utilities is required to save additional demand.

*Air Quality.* Cumulative development could contribute to cumulative air pollutant emissions should there be increases in traffic and/or additional stationary sources of emissions on the site. Cumulative air quality issues in the San Francisco Bay Area are being addressed through regional air quality plans developed jointly by BAAQMD, ABAG, and MTC. These plans reflect anticipated regional land use and transportation patterns. BAAQMD regulations require most new industrial facilities to fully offset emissions that will be generated by their operations. The BAAQMD believes that current air quality programs have achieved and will maintain the federal ozone and carbon monoxide standards in the Bay Area under anticipated development patterns.



*Noise.* Development of the FDP would increase construction noise generated on the facility. This noise could occasionally be audible in nearby off-site residential areas. This impact could be mitigated through limits on hours of construction, careful selection of construction equipment, and elimination of pile driving where feasible.

*Hazardous Materials and Waste.* Implementation of the FDP could generate additional hazardous materials and waste associated with construction, demolition, and operations. These materials and waste would not result in significant impacts if they are handled and disposed of in a safe manner consistent with applicable federal regulations.

## 5.6 Environmental Justice

On February 11, 1994 President Clinton issued an "Executive Order on Federal Actions to Address Environmental Justice in Minority and Low-Income Populations". This order requires that the relative impacts of federal actions on minority and/or low-income populations, if any, be addressed to avoid the placement of a disproportionate share or burden of the adverse impacts of federal policies and actions on these groups. The Outer Richmond neighborhood of the City of San Francisco, a middle income area with a mixed ethnic makeup, would be the relevant region of influence for analyzing issues of environmental justice from this project because the impacts associated with construction of the proposed Neurosciences Building would occur primarily at the neighborhood level.

The proposed action would not result in any potentially significant environmental impacts. In addition, there would be no change in land uses or population on the VAMC; rather the facility would represent a transfer of existing uses already occurring on the site. Services provided at the proposed facility would benefit members of all ethnic and income groups. Therefore, development of the Neuroscience Building is not expected to result in disproportionate impacts to low income or minority populations.

## 6. CONSULTATION AND COORDINATION

The federal, state, and local agencies and private agencies/organizations that were contacted during the course of preparing this Draft EA are listed below.

### **Department of Veterans Affairs Medical Center**

Jeff Lee  
Mark Fenicle

### **California Coastal Commission**

Mark Delaplaine

### **California State Historic Preservation Office**

Cherilyn Widell

### **Department of Veterans Affairs, Washington, D.C.**

Dave Starkie

### **National Park Service, San Francisco**

Gordon Chappell

### **National Park Service, Golden Gate National Park and Recreation Area**

Steve Haller

### **National Park Service, Denver**





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## **APPENDIX A**

### **NHPA SECTION 106 CONSULTATION COVER LETTER**





DEPARTMENT OF VETERANS AFFAIRS  
Medical Center  
4150 Clement Street  
San Francisco CA 94121

SEP 09 1995

In Reply Refer To:

662-138

Department of Parks & Recreation  
California Office of Historic Preservation  
Attn: Ms. Cherilyn Widell  
State Historic Preservation Officer  
P. O. Box 942896  
Sacramento, CA 94296-0001

Dear Ms. Widell:

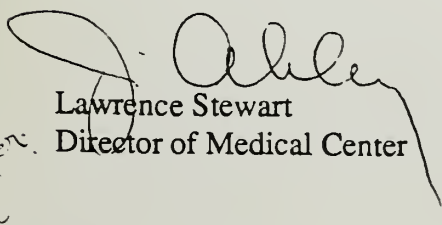
The U.S. Department of Veterans Affairs (VA) is presently proposing the construction of a Neurosciences building on the southeastern side of the VA San Francisco Medical Center. As a result of this project, an Environmental Assessment (EA) is being prepared. Cultural resources are currently being identified and assessed for impacts in this EA.

In the attached Draft EA, provided for your review, cultural resources identified included the Fort Miley National Register District and possible subsurface archaeological deposits. Impacts to the National Register District include visual intrusion. However, the setting of the District was disturbed by the 1976 construction of a large structure and setting is no longer considered a contributing factor for the eligibility of the District. Any additional effect to District buildings from construction are considered minimal but the establishment of a restricted construction zone has been recommended. The likelihood of archaeological buried deposits in the project area is considered to be low; however, the presence of an archaeological monitor has been recommended.

As a result of the recommendations presented in this EA, a determination of no adverse effect to cultural resources has been identified. Therefore, in accordance with 36 CFR 800.5 (d) (1) (i), we request your concurrence with this finding of no adverse effect.

If you have any questions or require additional information, please call Phyllis Potter, Senior Environmental Project Manager, Tetra Tech. Inc. at (415) 974-1221.

Sincerely,

  
Lawrence Stewart  
Director of Medical Center

"Enclosure"





**APPENDIX B**  
**PHOTOGRAPHS**







1. Entrance to VAMC from Clement Street at 42nd Avenue



2. View Looking West across Fort Miley Circle





3. View of site from Clement and 43rd Avenue looking northeast



4. Looking East from Clement and 43rd Avenue







5. View of subject property from Fort Miley Circle sidewalk, looking west



6. View of subject property from north concrete walk, looking southwest







7. Surrounding land uses to east: landscape and utilities



8. Surrounding land uses to west: VAMC main hospital building





9. Surrounding land uses to north: parking lot and VAMC buildings



10. Surrounding land uses to south: multi-family residential





## **APPENDIX C**

### **COASTAL CONSISTENCY DETERMINATION**





OFC OF DIRECTOR  
VAMC, SE 11 1921

DEC 6 2 43 PM '94



Sincerely,

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